

THE
ARCHITECT
& BUILDING NEWS

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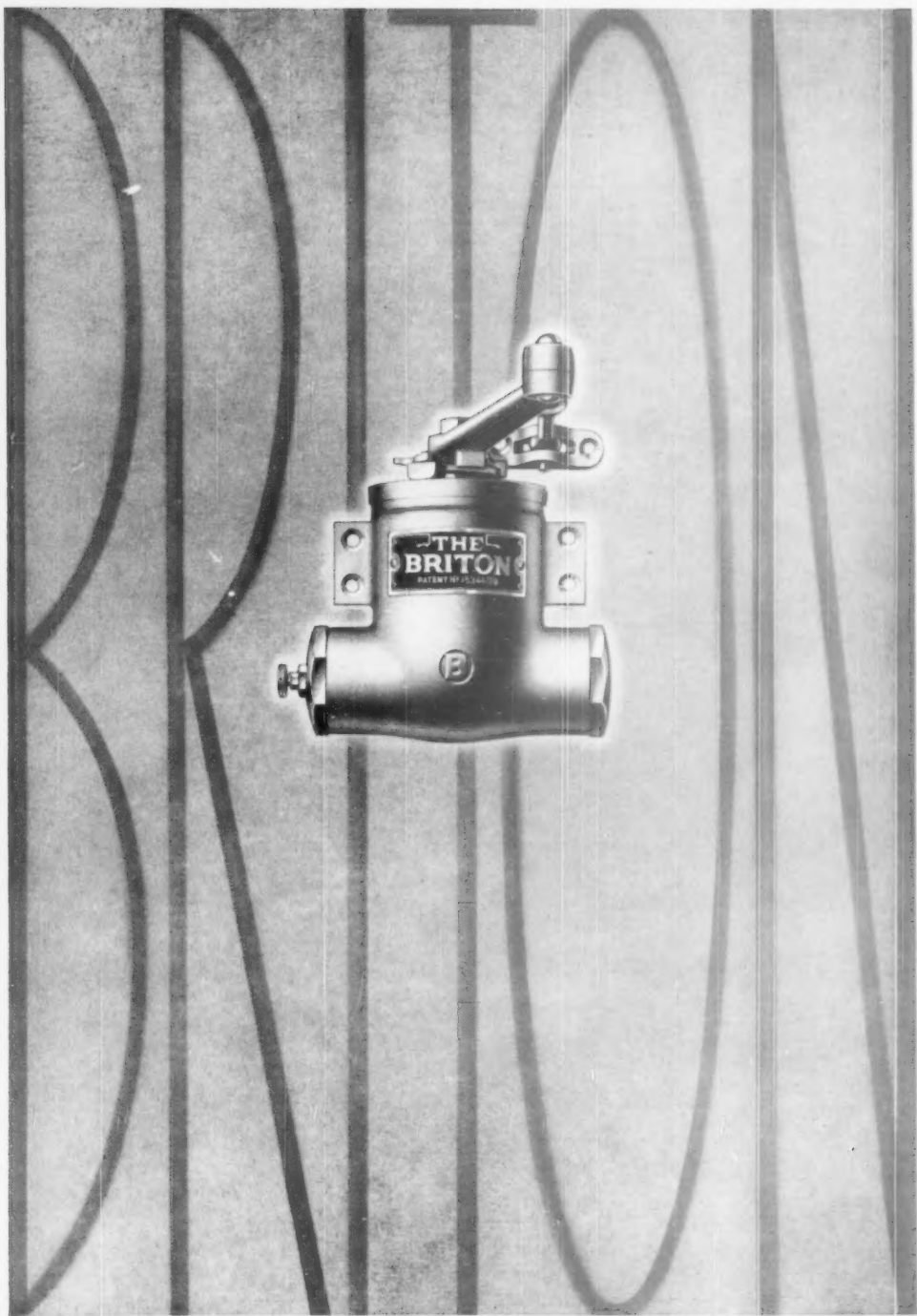
• ARCHITECTURAL EDUCATION

MAY 5, 1950

• VOL 197

• NO 4246

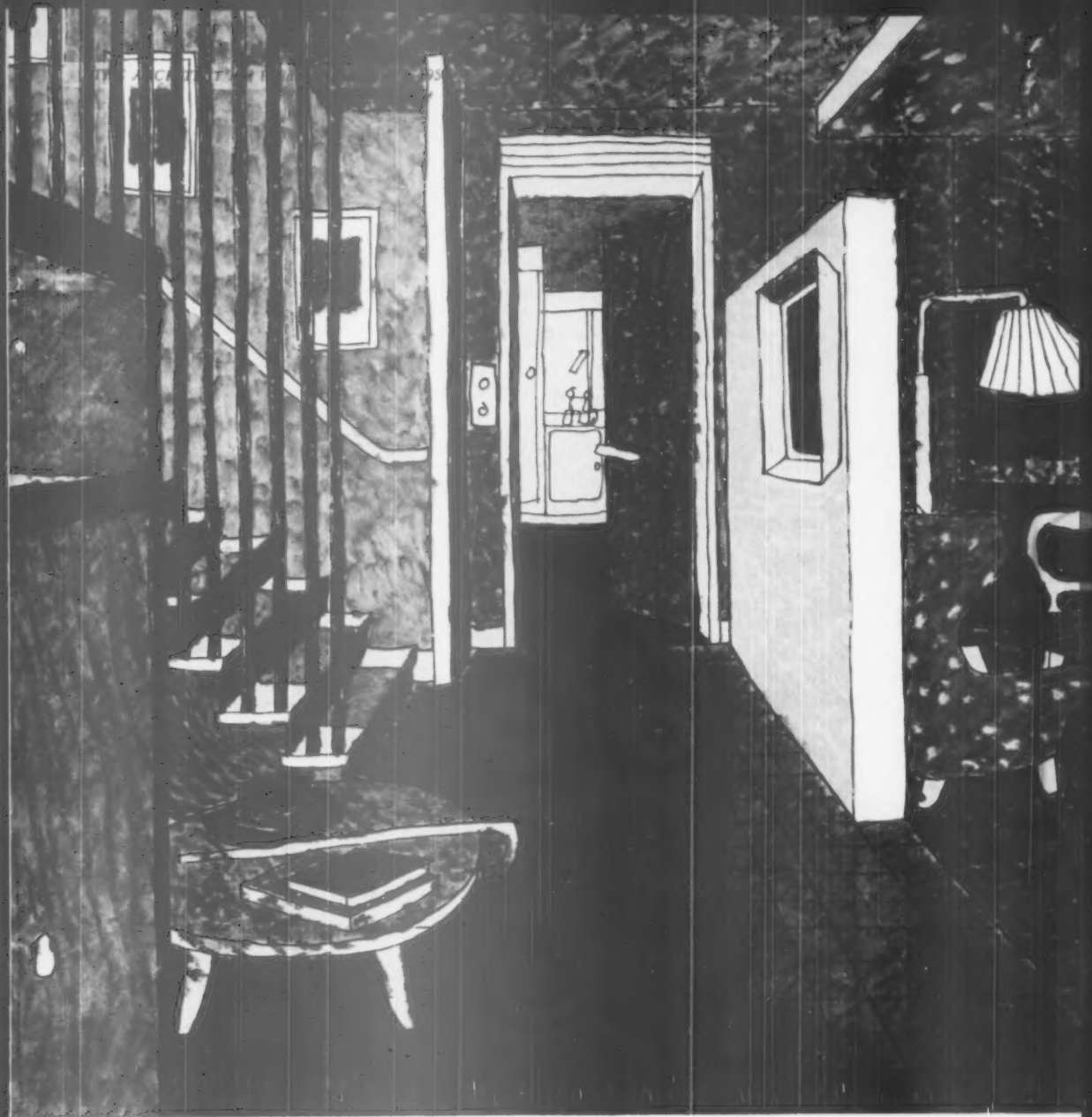
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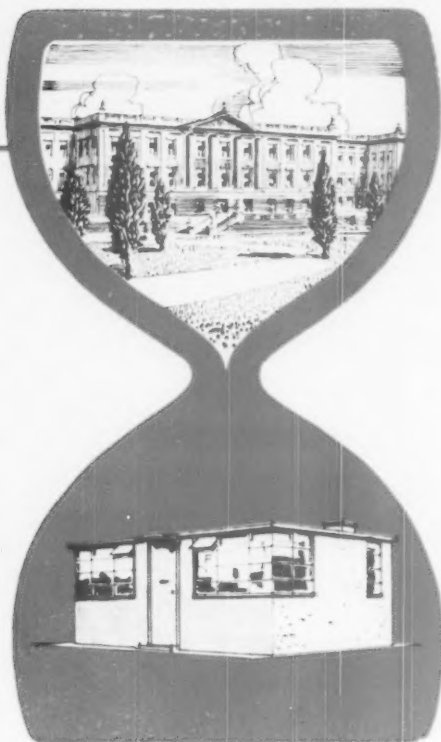
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There was a lure and a fascination in the trade of the East Indies with its fabulous wealth in silks and spices, silver and gold, precious gems and splendid hard woods. Companies were formed in Holland, France, Denmark, Scotland, Spain, Austria and Sweden, but the most famous and romantic of these was the "Company of Merchants of London trading into the East Indies." It was granted its charter in 1600 with the prime object of competing with the Dutch, who were excellent seamen and colonists, and were rapidly penetrating the East and setting up their trading posts everywhere. Early voyages were undertaken separately by individual subscribers but after 1610 they were conducted on the joint stock system. This was then a novel device made possible by the increasing financial expertness of the City of London.

Until late in the 19th century no merchantman was able to sail unarmed. Vessels had to be prepared to fight pirates, privateers and the ships of rival ports and companies. East Indiamen were thus equipped to beat off their Dutch, French and Portuguese rivals as well as pirates. They carried great stores of arms and many fighting men. It was this call upon precious cargo space

EAST INDIAMEN

that prompted the Company to establish their own dockyard in Deptford in 1609 to build bigger and better ships.

The famous East Indiamen built in the Deptford yards held unquestioned eminence throughout the world. Built in 1830 the Buckinghamshire of 1369 tons, was the last and greatest, being manned by 130 men and carrying 26 guns.

By 1611 the first English factories were established in India at Masulipatam and Pettapoli on the Bay of Bengal, and slowly but surely they became unrivalled. Dutch, French, Portuguese and other competitors were forced to seek their trade further East.

The Company developed India and penetrated up-country on a semi-military, semi-trading basis. Generation after generation of English families gave their lives and services to the Company. The fortunate returned as "nabobs" with vast wealth but many more died of fever or in fighting for the Company. It governed India until Queen-Empress Victoria assumed control of British India and then the East India Company with all its vast resource and power became a romantic memory.



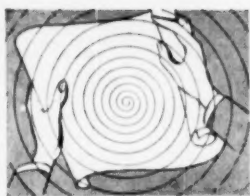
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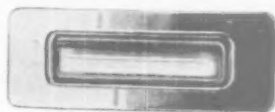
present themselves for open design and a new deployment of doors and window lighting.

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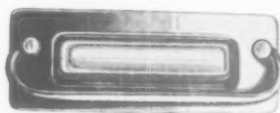
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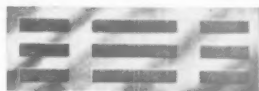


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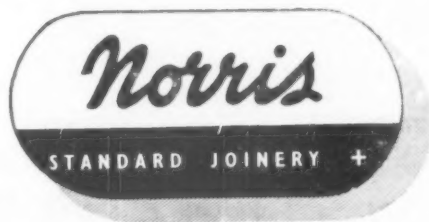


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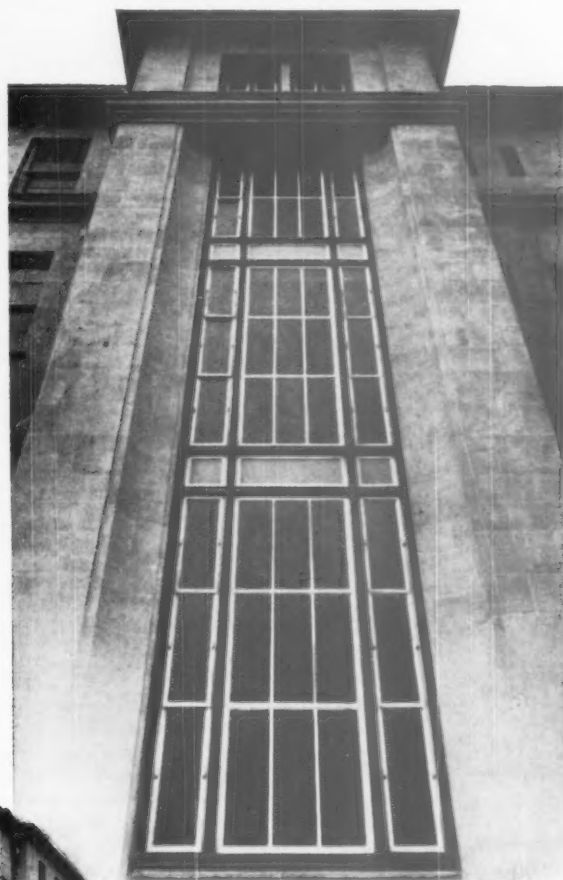
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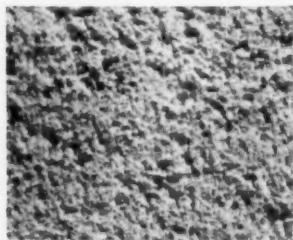
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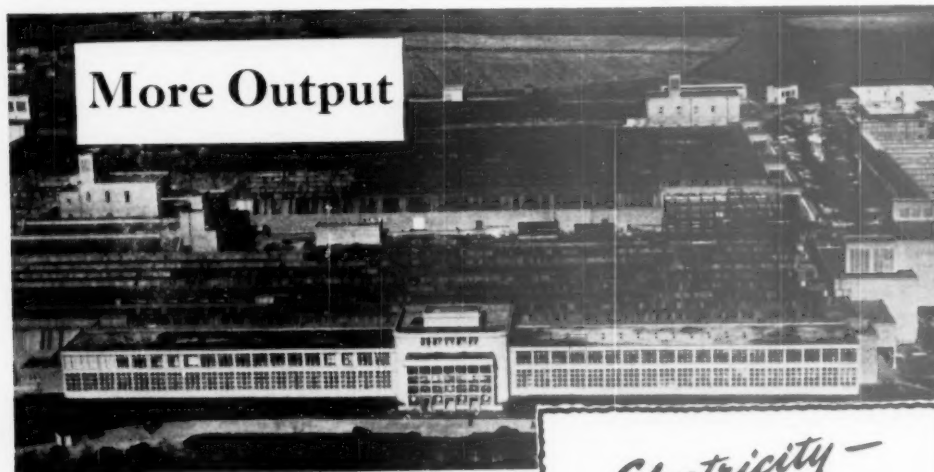
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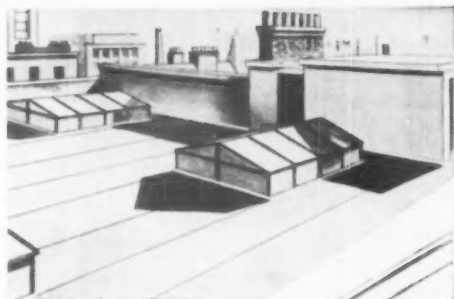
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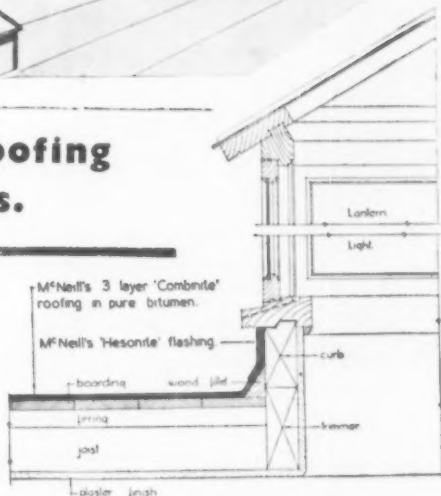


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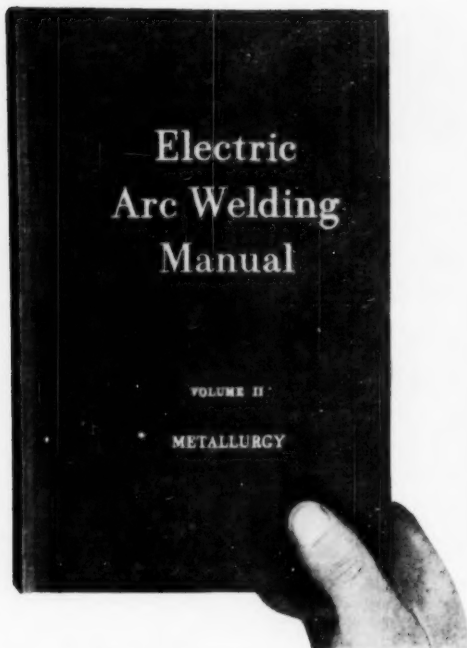
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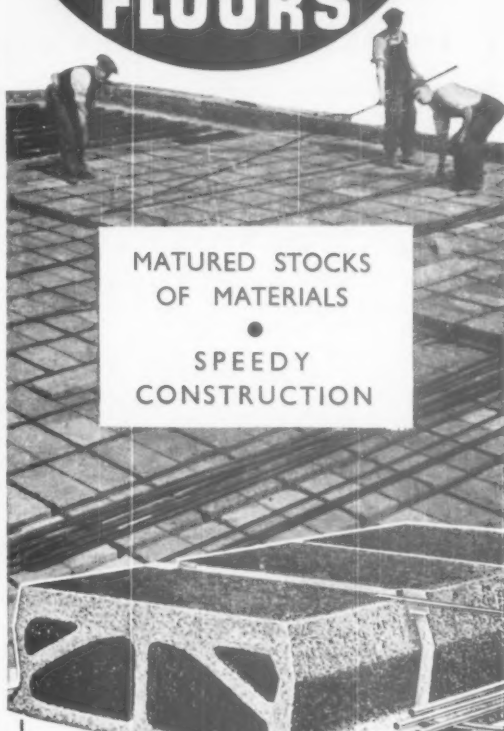
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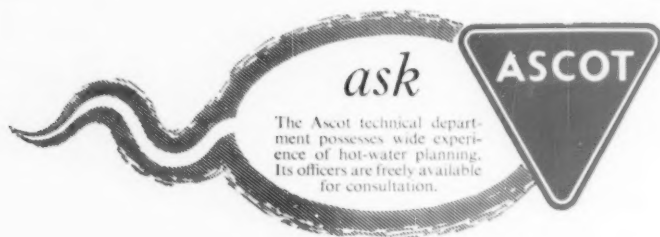
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THE ARCHITECT & BUILDING NEWS

The "Architect and Building News" incorporates the "Architect," founded in 1849, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. 0d. post paid; U.S.A. and Canada \$9.00. Published by ILIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E.1. Telephone: WATERLOO 3333 (50 lines). Telegrams: "ARCHITONIA, SEDIST, LONDON." Branch Offices: Coventry: 8-10 Corporation Street; Birmingham: King Edward House, New Street; Manchester: 260 Deansgate, Tel. Blackfriars 4412 (3 lines), Deansgate 3595 (2 lines); Glasgow: 26B Renfield Street.

PRACTISE AND PRACTICE

EACH year an appeal goes out from the schools, either through the Press or by means of letters to selected architects, for the latter to take students into their offices for the summer vacation.

This is a somewhat new notion of professional training; it has grown extensively since the recent war. One of the main reasons why it should have so arisen is the continued criticism that students, when they leave the schools, have very little practical knowledge to fit them for usefulness in a work-a-day office; so an attempt has been made to hit the ball back into the practitioners' court.

Now, however, the R.I.B.A. is extending the time required to be spent in an office or otherwise on practical work to a year after the usual five years' course, with a sort of examination of the graduate on the experience and results of the year's work—when he has completed it; another attempt to meet the professional criticism about the "green 'un" from the schools.

What does all this amount to? The student is merely a shuttlecock and as such we have every sympathy for him; for it is impossible for him to make up his mind what are the rights of the case or what his best course should be—he has but a short and limited experience of the professional world and its ways and must, therefore, lean on the advice of the schools or have faith in the rightness of the practitioner's criticism.

In the first place, if the schools do not cater sufficiently for the practical things, what is their time expended on? Is there too much theory? (There's probably not enough general knowledge and history.) Are there too many "extra" subjects? Or too many hours given up to semi-literary or semi-social researches? Are these the reasons why a student has to go out during his vacations to seek corrective diet?

Another question does sometime arise—are the schools staffs themselves always sufficiently experienced enough to advise on the practical organization and detailing of architectural work? Some schools give opportunities for "practical work"—meaning actual building and workshop practice—but useful as this may be to teach students how to handle actual materials and processes, it is not quite what is wanted by the architect's office in actual practice.

Should the practising architect be the safety valve? Should he fill the gaps? After all, for him to be asked to do so might be regarded by an impartial person as an admission of the incompleteness of school curricula or a sneaking sort of reversion to the few advantages of the old pupilage system. To have a student in a busy office, where he rarely sees the "boss", where he cannot, in the brief six or eight weeks available, possibly fit in thoroughly, is often for the practitioner an assumption of a liability and one for which he is, generally, asked to pay.

On the other hand, the method may give more intelligent students some insight into how an office works—for good or bad—and to allow a few to see something of work being carried out on a site under the supervision of an architect and his staff.

What should students do with their longer vacations? Ultimately, of course, it is a matter for each individual to settle. Some, of necessity, will have to go out to earn some extra money; in these hard times any grist helps on the way through the long course of training. In these cases we are inclined to think that the architect's office is not the only possible source of revenue. Works or workshop jobs, with builders or sub-contractors, or in the clerk-of-works' hut or even work more remotely connected with architecture or its practice might do no harm to he who treats all experience as a contribution to his art.

Some students, however, want their hands more tightly held; they might well go into offices, whether wanting the money or not. But what of the majority?

Long years ago, we seem to remember that many students reckoned the long vacation was the time for travel, for sketching, for the study of texture, scale, form and the use and materials of buildings and perhaps for the more formal "measured drawing." Foreign travel is not so easy now and rucksacks, Shanks's-mare or even bicycles not so popular as they were; but, even so, we believe that architecture is suffering as much from lack of "quality" and the love of it which such studies and experiences bring, as from the absence of "practical" office experience.

How students can get experience of designing and detailing for quality materials is, at the present time, a difficult proposition—so little work other than utility is being done. The only alternative is to study the details, the materials, the quality of the past, whether it be distant or recent. Appreciation of decorative or mural painting and of sculpture in relation to build-

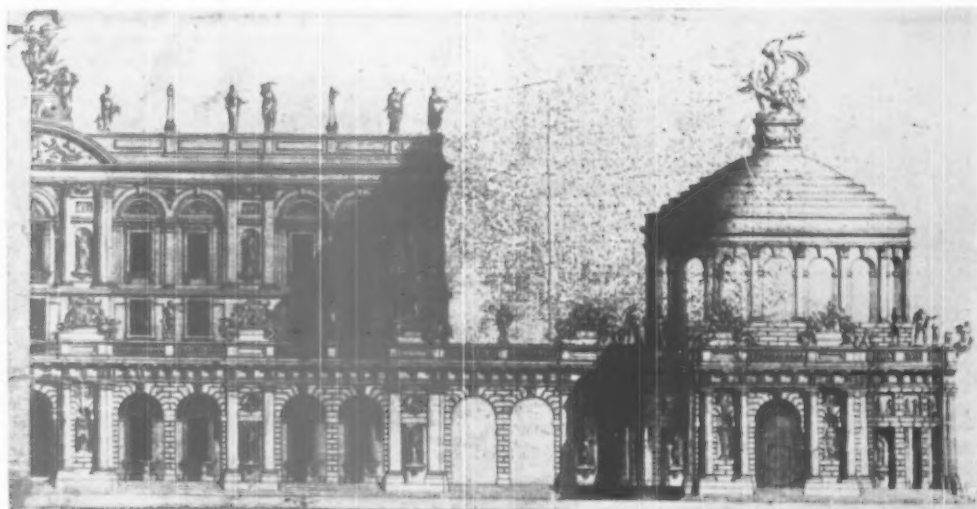
ings is scarcely likely to be found in the average office of to-day; yet understanding and feeling even for these two attributes of architectural quality cannot be left out of a range of study and where else can it be found except through travel and the contemplation of past successes and failures. There is a great deal to be said for the discipline and enlightenment of an architectural tour, wherever it is taken and whatever the means of locomotion—and the slower the better.

With the extended practical experience required by the R.I.B.A. and approved by A.R.C.U.K., we cannot see that the busy architect's office is the inevitable venue for the immature and half-baked student in the hot summer months of the year. There are plenty of other outlets both for his physical and mental activities; we have mentioned some, and there are, doubtless, many others. An architect's experience is the experience of life itself and of all its facets, and the student cannot start too young or break away from the rarefied atmosphere of his school studio and the lecture room too soon—but the office is not necessarily the only or the best way of doing so.



ARCHITECTURE AT THE ROYAL ACADEMY

Air Forces Memorial, Coopers Hill, Runnymede: The Shrine and the Cloister. Edward Maufe, R.A.



One of the unidentified drawings in the R.I.B.A. library: Half the facade of a Renaissance Palace.

EVENTS AND COMMENTS

R.I.B.A. RECEPTION

I ENJOYED this year's reception very much, but as usual the glutinous floor of the Henry Florence Hall made hard work of dancing even with the most fairy-like and co-operative of partners. The standards of beauty and sartorial elegance were well maintained and there were many remarkable dresses, gowns and frocks. All grades were represented, from very early morning dress to extremely late in the evening dress.

I am ashamed to say that I did not get as far as any of the sideshows, although I heard many people praising them. The exhibition of unidentified drawings, to which guests were asked to give artists' names, has so far only produced about half-a-dozen suggestions. The exhibition is to remain open for a month.

The refreshment arrangements did not seem to work with quite their accustomed smoothness, for the coffee ran out rather early and there were insufficient glasses. I do wish that something could be done about a paying bar, for cider cup and small beer are not everyone's tippie.

In the past there has been criticism of the men's cloakroom accommodation, and as a result various improvements had been made for the night. The horrid little pieces of paper had disappeared in favour of coloured tallies and the racks had been divided into sections with an attendant to each. Beyond the pale railings had been constructed to control the flow of architectural gentlemen. Unfortunately there was no indication of which was "in" and which "out," with the result that queues formed in each direction and highly trained and extremely logical planners and architects were seen climbing over or under the railings. A moral somewhere?

THE ROYAL ACADEMY

THE buildings illustrated in the Architectural Room this year are as unremarkable as ever and even Raymond Erith failed us. His contribution of a row of three very early Victorian houses falls far short of last

year's fort-like structure. Among the others there are several scholarly contributions but nothing much to fire the imagination. I think that the draughtsmanship is very much improved. Presentation is, on the whole, good. There is some surprisingly poor lettering and some of the perspectives depart from their purpose of illustrating buildings to become paintings in which the buildings play a secondary part.

I would like to see an exhibition of the rejected works, but perhaps that is a rash thing to say, as it conjures up that dangerous bogey, the Salon of Architecture. Not all architect academicians have exhibited this year and I saw nothing from Sir Giles Gilbert Scott, Arthur Davis or Brian O'Rourke. Outside the Architectural Room architects are quite well represented by watercolours and drawings by Professor Richardson, Rowland Pierce, Curtis Green, E. B. Musman and Frank Hoar.

In the main exhibition there are far more good pictures than there are usually, and I found myself constantly referring to my catalogue. I hope it was not just my imagination, but I thought I could detect a broadening of vision on the part of the hanging committee. I liked particularly two pieces of sculpture, "Opus No. 3" by Estcourt J. Clark, carved from a great chunk of beautifully figured and coloured yew, and "Pavla," in reinforced concrete, by Edward C. N. Folkard, which made the smooth bulk of Sir William Reid Dick's Lady Godiva look rather insipid.

The attendance at the private view was as varied as usual. I went in the afternoon and so missed the hats. Usually there are some good ones in the afternoon, but this year I saw nothing at all remarkable. The Academy Twins were there, of course, this year in broad blue and white striped sweaters, bright blue skirts and sandals. Almost the only competition came from a young gentleman in fawn overcoat with deep brown plush collar, drainpipe trousers, spats and a very hairy bowler hat.



NEW RESERVOIR AT CHINGFORD

My picture bears the agency caption "Not a picture of Holborn Viaduct set down in Wembley Stadium, but merely the Metropolitan Water Board's new £2,055,000 reservoir at Chingford South..." To my mind the usually not very apt captioner has this time hit the nail plonk on the head.

The architecture is perhaps neither better nor worse than one would expect, but the odd part to my mind is that there should be any architecture at all. Look at that expensive fancy masonry; it seems unnecessarily extravagant when, apart from the official opening day, the only people who will see it will be turncocks of various grades. In time of drought when the tide is out perhaps the M.W.B. could turn an honest penny by holding motor races round the outer banking.

PAINTED BOATS

The Inland Waterways Association announces the Market Harborough Festival and Rally of Boats from August 14 to 19. Among the attractions promised are painted boats from Britain and the Continent, fireworks, a mammoth fair, band concerts, a ball, and boating awards and trophies. It all sounds very gay, and if the real boat people can be persuaded to attend it should be well worth seeing.

I cannot quite make out what is happening about the Basingstoke Canal. You will remember that originally the I.W.A. organised a campaign to raise money to buy the canal and thus save it from being filled in or exploited. I believe that a separate company was formed to buy the canal and did so. The I.W.A. had no more to do with it. Now, I understand, the original pur-

chasing company has sold it and no word of protest has been heard. Who the purchaser is and what he proposes to do with the canal I do not know, but it is odd to see that interest in the subject seems to have ended.

U.N.O. BUILDING

SOME months ago I wrote of the all-American U.N.O. building and the disappointment of British firms who had hoped to supply some of the materials. I now hear that the Bath and Portland Stone Firms have secured an order for \$25,000 worth of Portland Stone for facing the Conference Hall which is now being built. This is a pretty small slice out of the total amount to be spent on the three buildings, but there seems to be some hope that the same material will be used for the Assembly Hall as well. All three buildings are due to be completed in 1952.

ASBESTOS AND NATIONAL PARKS

THE Lakes Urban Council refused to allow a farmer to roof a building with asbestos sheeting. The farmer appealed saying that the building was essential and that he could not afford the Westmorland slates required by the Council. He had, however, built the building of local stone. A public inquiry was held before an inspector of the Ministry of Town and Country Planning. Those who objected said that the preservation of natural beauty was more important in the National Parks than anywhere else in England, and that, if the building concerned had been outside the designated area no objection to asbestos roofing would have been taken. The farmer, who was supported in his appeal by the representative of the County Council, asked for compensation to cover the cost of the slates. It seems to me that if a building is vital to a farmer, no one should be in a position to force him to pay more money than he can afford on materials which are not essential to the purpose of the building. Turning large areas of the country into National Parks is not only an excellent idea but an expensive one as well. Compensation to this type of building owner must be one of the expenses.

HOUSING CENTRE CONFERENCE

"HOUSING: The Next Fifty Years" will be the theme of a conference organised by the Housing Centre, to be held at the Dome, Brighton, from June 9 to 11. Speakers will include the Earl of Verulam, Mr. Richard Costain, Mr. R. Fitzmaurice, and Mr. J. Bommer, secretary of the Dutch Organisation of Housing Associations and adviser to the Netherlands Ministry of Housing and Reconstruction. Visits will be made to Brighton housing estates, and Crawley New Town. The Mayor of Brighton will hold a reception and there will be two film shows. Further information can be obtained from The Housing Centre, 13 Suffolk Street, Haymarket, London.

I see that no architect is down to speak. This seems an odd omission.

REPORTS YOU SHOULD READ

It is unfortunate that the two reports for which we have all been waiting—what reports? My dear sir!—should have such badly clashing covers. A trivial criticism, I know, but they are bound to be carried about and to repose on tables and desks together. It would also have been better, too, if they had been the same size. Different departments? Difficulties? No point? Very well, I am sorry I mentioned it. You will want to know what is inside them. You must, if you have any pretensions to knowing what is going on, read both for



What is Dior up to this Spring?

yourself. Get them now. The first is called "Working Party Report, Building," and the second "Productivity Team Report, Building." Both are published by H.M.S.O. and each costs 2s. 6d. As far as appearance goes the productivity team report on American building has in it pictures and all. The Working Party report has an orange cover, which starts it off at a disadvantage.

Next week I shall comment on the national Press reactions to the reports; meanwhile, I hope you will get on with your homework.

THE RED HOUSE

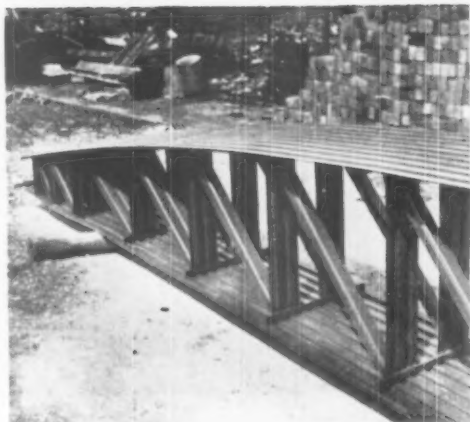
I HEAR from one of my agents that William Morris's Red House at Bexley is for sale. It is a largish place and may not readily find a buyer. It is essential that it should be preserved intact and not converted into flats by an over-zealous local authority when no one is looking. Here is a chance for the Morris fans to organise something, or maybe the M.P. for Bexley? The house, which you will remember was designed by Phillip Webb, stands in about an acre of land near Bexley Heath Station.

FESTIVAL OF BRITAIN AND THE HUMANE ELEMENT

THE *Daily Express* reported on Monday that a model of the exhibition to be shown to the King and Queen would not go through the door of the Festival Offices and had to be taken away for alteration. This enabled it to pass the outer door but it would still not go into the lift or up the stairs. It has now been cut into sections.

I can now tell you that it was a template, not a model, and that it was Hugh Casson who intervened and saved the situation.

This all sounds pretty silly, but the same sort of thing happens every day, from letters that will not go into the only envelopes available to people building heavy boats in their back parlours ten miles from the nearest water.



FESTIVAL ROOF UNIT

MY photograph shows one of the dovetailed steel sheet bow-string roofing units for Wells Coates' Television Cinema at the Festival of Britain. The units are 32ft. long, 2ft. wide and 3ft. deep at their centres. Externally the steel sheeting is to be covered with 3ins. of concrete and finished with asphalt. The upper side of the lower member is to be covered with rock wool slabs on which there will be a layer of dry-mix concrete.

A suspended plaster ceiling will be attached to the underside of the lower member by insulated clips. The units are being fabricated by Steel Ceilings Ltd. in South Wales and are being transported complete to the site.

ABNER

NEWS OF THE WEEK

Competition Result

The result of the competition promoted by Norfolk Education Committee for the design for a County Modern (Secondary) School at Hunstanton is as follows: First premium of £500; Alison and Peter D. Smithson, A.A.R.I.B.A., Dip.Arch., 32 Doughty Street, London. Second premium of £250; John B. Diamond, B.Arch., A.R.I.B.A., 7 Upper Grosvenor Street, London. Third premium of £150; G. Whitby, O.B.E., A.R.I.B.A., 28 Gt. Ormond Street, London. The Assessor was Dennis Clarke Hall, F.R.I.B.A.

Kent Panel of Architects

Kent County Planning Committee has decided to extend indefinitely the arrangement made initially for twelve months whereby a panel of independent architects is available to advise the Council on the architectural aspects of certain planning problems.

The Chairman of the County Planning Committee, Capt. W. Wigham Richardson, states: "This panel was

formed as an experiment which my Committee regards as useful and successful. Very few cases have had to be referred to the panel, but it is believed that the very existence of the panel is of great value not only to the Council but to the public.

"Suppose, for example, that an important matter of design is in dispute. A person may want to build a house to a design which the Council considers to be unsuitable. In such a case, one has to decide on a matter of taste and not of fact. It is assuring to persons proposing to build and to their professional advisers to know that a third party like the panel is available to give an independent opinion on the merits of the proposal, and to advise the County Members in difficult cases."

Division of Labour

Mr. Stokes, Minister of Works, informed Mr. Gibson that the present proportions of building and civil engineering labour employed on the construction of houses, repairs and maintenance of houses, and on pro-

jects other than housing, were estimated to be respectively 24.2 per cent., 27.9 per cent., and 47.9 per cent. The comparative figures for February, 1949, were 23.6, 31.6 and 44.8 per cent. (April 24).

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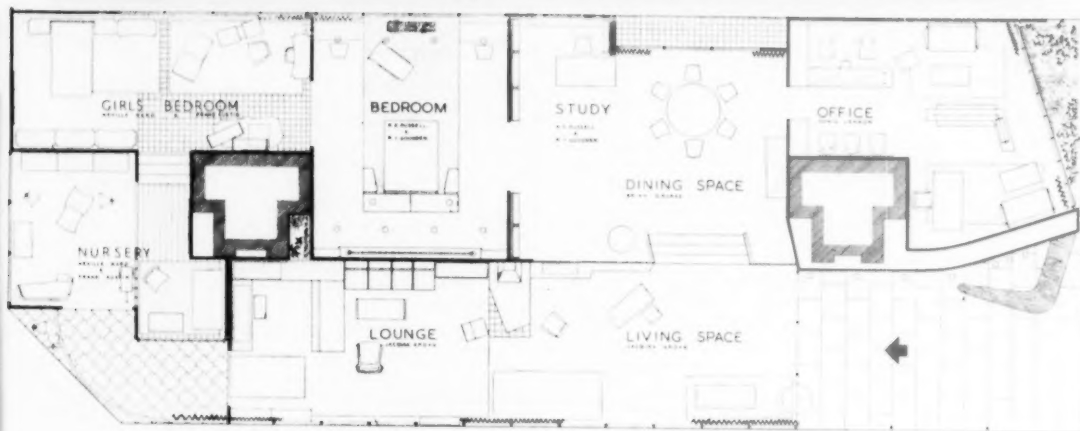
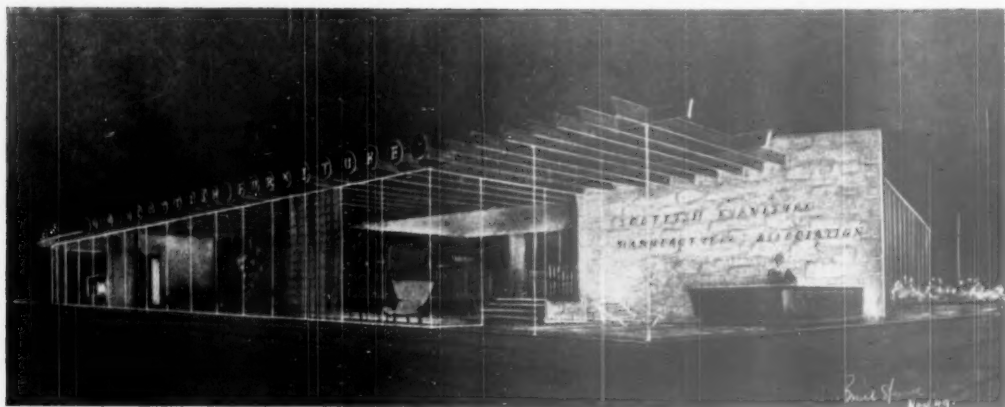
R. Myerscough-Walker is to resume practice as a Prospectiveist and will work from Newfarm, Bepton, nr. Midhurst, Sussex, to which address all communications should be forwarded.

*

Mr. Douglas L. Dick, F.R.I.B.A., who was Principal Architect to the *Daily Mail* Ideal Home Exhibitions for the years 1948, 1949 and 1950, has been appointed Organising Architect to the Industrial Finishes Exhibition to be held at Earls Court from August 30 to September 7, 1950.

ARCHITECT'S WILL

Mr. Thomas Bowhill Gibson, Chartered Architect, sometime of 30 Rutland Square, Edinburgh, and late of Strath House, Avonbridge, Stirlingshire, left £15,013.



SCOTTISH FURNITURE FOR EXPORT

British Industries Fair opens next week at Birmingham, Earl's Court and Olympia. The Scottish Furniture Manufacturers' Stand has been designed by Basil Spence, O.B.E., F.R.I.B.A., F.R.I.A.S., M.S.I.A., and will occupy 3,000 square feet at Earl's Court on the first floor. The stand has been arranged to show the interior of a contemporary American house of six rooms, and a team of designers has produced furniture to fill it. In addition to the co-ordinating architect Basil Spence, the designers include Brian O'Rourke, R. D. Russell, R. Y. Goodden, Jaques Groag, Dennis Lennon, Neville Ward and Frank Austin.

CORRESPONDENCE

Hemel Hempstead New Town

To the Editor of the A. & B.N.

Sir,—In your issue of April 14 you published details of the basic town planning proposals at Hemel Hempstead, and with it the names of the authors. From this it might be assumed that no consultant had made any material contribution. The facts are otherwise. My own plan was received by the Corporation in the summer of 1947, and following a year as consultant I was able to agree in principle, but not in detail, in the summer of 1948, a modified version of this plan. Thereafter our paths diverged so far that by September I could see no good use in continuing as consultant. In the summer of 1949 the Corpora-

tion published their own plan and report, with no acknowledgement to the original, a proceeding that called for comment in the *Architect's Journal* of September 22. I received later a letter of condolence rather than of apology from the Manager, in which he kindly paid more than generous tribute to the part I had played. I have never been asked my views about acknowledgement, nor have I offered any, since it is disagreeable to do so.

It is not the purpose of this letter to question whether my way of thinking was better or poorer than that of the Corporation's officials, but to register a reasonable protest against the way the fundamental contribution of an independent architect may so soon be engulfed, lost, and forgotten in the workings of a great State organisation.

I am, etc.,

G. A. JELlicOLE.

To the Editor of A. & B.N.

Sir,—Having just seen the exhibition of design for a Students' Hostel in Nottingham we wonder whether the question of the moment is not "Where are we going?" but "Where have we gone?"

Walking round this collection of imitation Tudor and pseudo-Baronial and things, and hearing the amused comments of University students, we asked ourselves if the majority of competing architects had made any attempt to appreciate the requirements of the prospective occupants or of their way of life?

Should a University which was granted its charter in 1949 look like something out of the seventeenth or eighteenth centuries?

We are etc.,

PETER BARTLETT.
GORDON GRAHAM.

LICENSING POLICY

Joint Statement by the Royal Institute of British Architects and the National Federation of Building Trades Employers

1. Informal representations have recently been made to the Ministry of Works by the R.I.B.A. and the N.F.B.T.E. pointing out that neither building owners, architects, nor building trades employers can gauge the effect on the issue of building licences of the cuts imposed on the building industry following the devaluation of the pound sterling; that, as a result, much time and effort is wasted in preparing plans, etc., in respect of work for which licences are subsequently refused; and that it would therefore be helpful if the Ministry issued a statement showing, in detail, the policy followed by them in dealing with applications for building licences. The view of the Ministry is understood to be, however, that they cannot give more detail than is contained in the statements already made in Parliament and in the Economic Survey. Whilst appreciating this difficulty, both the Institute and the Federation propose to raise the matter further with the Ministry. They feel, however, that in the meantime the following re-statement of the position might be of some little help to members of both organisations.

2. When de-valuation was decided upon, it was generally agreed that a reduction was to be made in the capital investment programme and as the Building and Civil Engineering industry was responsible for about one-half of this programme, the two organisations felt that the decision to reduce the expenditure on building and civil engineering could not reasonably be opposed. This decision, as announced by the Prime Minister in the House of Commons on October 24, 1949, was broadly:

- (a) To reduce the new housing programme by £35 million, the reduction to fall mainly on private enterprise housing, and
- (b) to make a further saving of about £35 million in what he termed the miscellaneous category.

3. The position was amplified by the Chancellor, also in the House of Commons, on October 26, 1949. He confirmed both the amount of the cut in new housing and the manner in which it would be made. After referring to reductions on building under direct Government control such as schools, he said, in dealing with the field of miscellaneous investment where a cut of £35 million was to be made, that as far as building and civil engineering was concerned much of the cuts would fall on maintenance and repairs; that to keep this work within bounds building controls would be tightened and the exemption limits of licensing would be lowered; and that although the reduction must be made effective as quickly as possible, no action would be taken which would dislocate works already in progress or seriously upset the balance of the nation's resources.

4. The Building Industry was not consulted about the new housing cuts, and the N.F.B.T.E. promptly made representations against their obvious political discrimination. Although the new housing cuts have now been restored, an announcement to the effect that the ratio of 9 Local Authority houses to 1 Private Enterprise has reverted to 4 Local Authority houses to 1 Private Enterprise is still awaited, and it is hoped that the ratio will be applied nationally instead of area by area.

5. The Industry was, however, consulted regarding the cuts in the miscellaneous field and the R.I.B.A. and the N.F.B.T.E. advised the Minister of Works that the £100 limit for housing should remain and that if the £1,000 limit for non-housing work had to be reduced, the new level should be considerably above the general limit of £100.

The Government eventually decided:

- (a) To maintain the £100 limit;
- (b) To reduce the £1,000 limit to £500 to apply only to industrial buildings and farm buildings other than dwelling houses;
- (c) To secure the remainder of the reduction by restricting the issue of licences by 20 per cent. in the licensing of work both on new works and maintenance. Included under these headings are office buildings, shops, churches, and recreational buildings of all kinds.

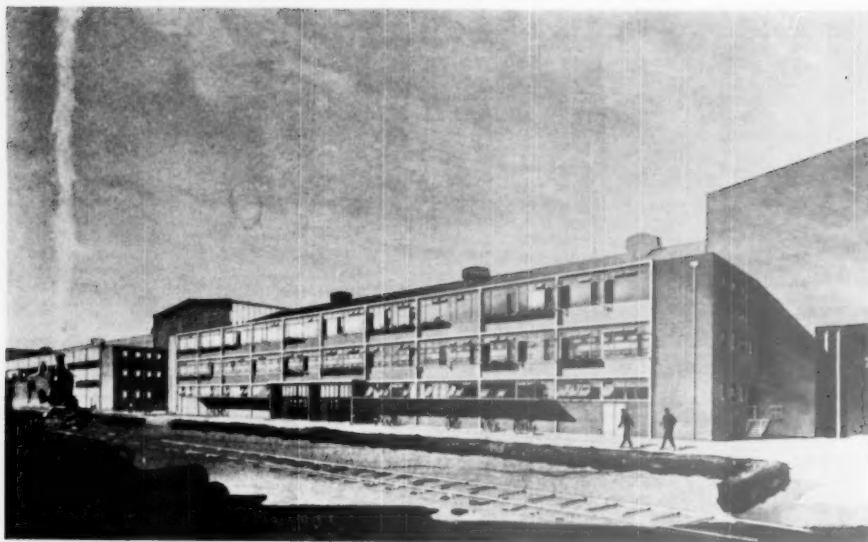
It was suggested that the working of these arrangements should be reviewed after a period of, say, three months.

6. The position was further dealt with in paragraphs 115-120 inclusive (and in the Appendix on pages 40-51) of the Economic Survey, 1950. It was pointed out that building and constructional work for the other social services—water, sewerage, health services, miscellaneous local government services, schools, universities, Home Departments' Services and broadcasting—would be limited approximately to the rate achieved at the end of 1949. There would also be some economies in constructional work in the transport and communications field and in the manufacturing industry. The limitation of capital investment also required a substantial reduction in the sector which comprised a wide range of miscellaneous investment in building including such items as the repair and maintenance of shops, offices and commercial premises (much of which is below the licensing exemption limits) as well as a smaller amount of new work in this field. In addition, restrictions would be imposed on repairs and maintenance to houses.

7. To sum up, it seems reasonable to infer that the restrictions on industrial building will continue and that the Sponsoring Departments, of which the principal ones are the Board of Trade and the Ministry of Supply, will continue to look very carefully at proposals put before them, and very largely restrict their approval to schemes likely to give a high export or import saving return, particularly in terms of dollars. On the other hand, encouragement will be given to projects designed not merely to increase capacity, but to lower the cost of production.

As regards the "miscellaneous" field, this contains such a varied collection of types of work that it is impossible to forecast with any precision what will be allowed and what will not. As will be seen, however, the Economic Survey specially refers to shops, offices and commercial premises, and the cuts that have to be made would, it seems, hardly leave room for new office buildings unless the circumstances were quite exceptional. In the same way, new shops and public houses seem likely to be severely restricted except on grounds of special need, e.g., in new housing areas. New work on places of recreation are likely to be allowed only if serious danger to the public exists or otherwise in the most exceptional circumstances. This is in line with the statement made by the then Minister of Works in the House of Commons on November 25 that no village halls would be allowed. As regards housing conversions and repairs and maintenance to houses, local authorities have already been instructed to restrict severely the value of licences issued in 1950 under this heading. For the majority of Local Authorities this decision can only throw an added strain on their already extended quotas and it is evident that some document such as a dangerous structure notice, will be required if an application for a building licence is to be successful.

8. The two organizations feel that the position as set out above is not entirely satisfactory. They hope that ways and means will be found by which the Ministry can issue a statement which will give more detailed guidance to owners, architects and building trade employers, without causing either confusion or misunderstanding.



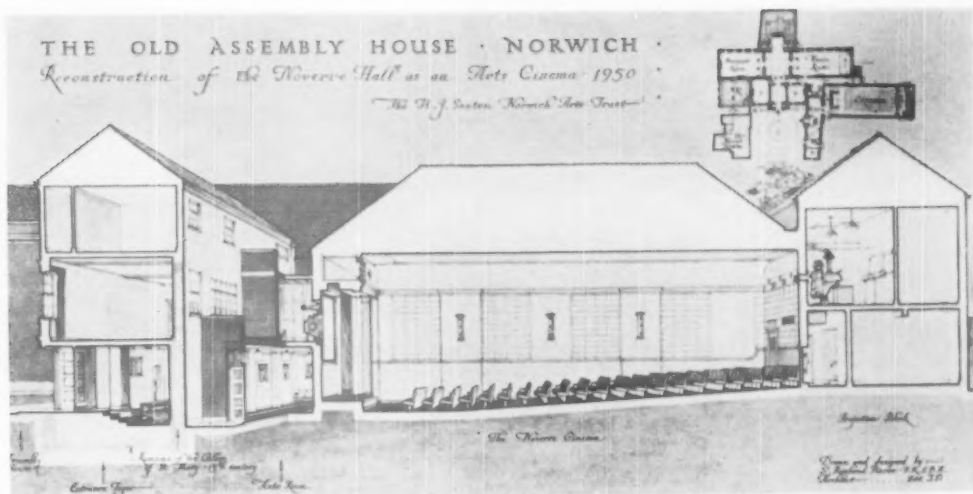
Engineering Works and Offices, Stockton-on-Tees: Geoffrey A. Jellicoe

drawn by Ronald Sims



Store Premises: Royal Parade, Plymouth: Howard Robertson (Easton & Robertson)

drawn by Maynard Smith



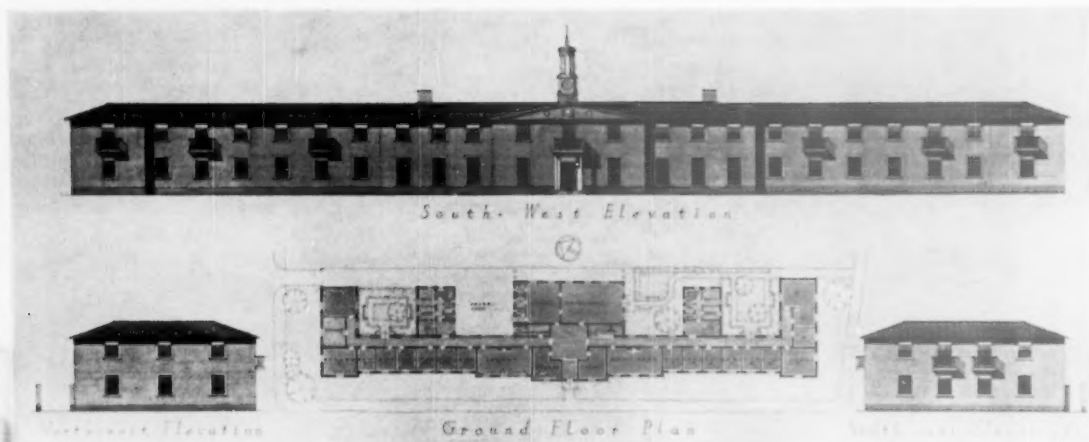
The Assembly House, Norwich: New Arts Cinema: S. Rowland Pierce.

drawn by the architect



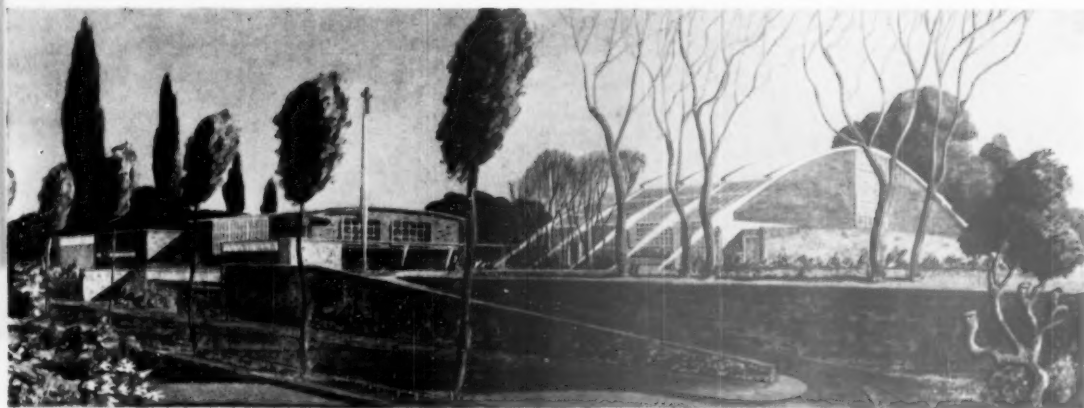
University of Cambridge, Department of Engineering: New Laboratories: J. M. Easton (Easton & Robertson)

ARCHITECTURE AT THE ROYAL ACADEMY



Hostel for the Elderly at Stepney: C. H. James, R.A.

drawn by Alison Bradshaw



Proposed Church of Saint Nicholas, Coventry: Messrs. Arcon

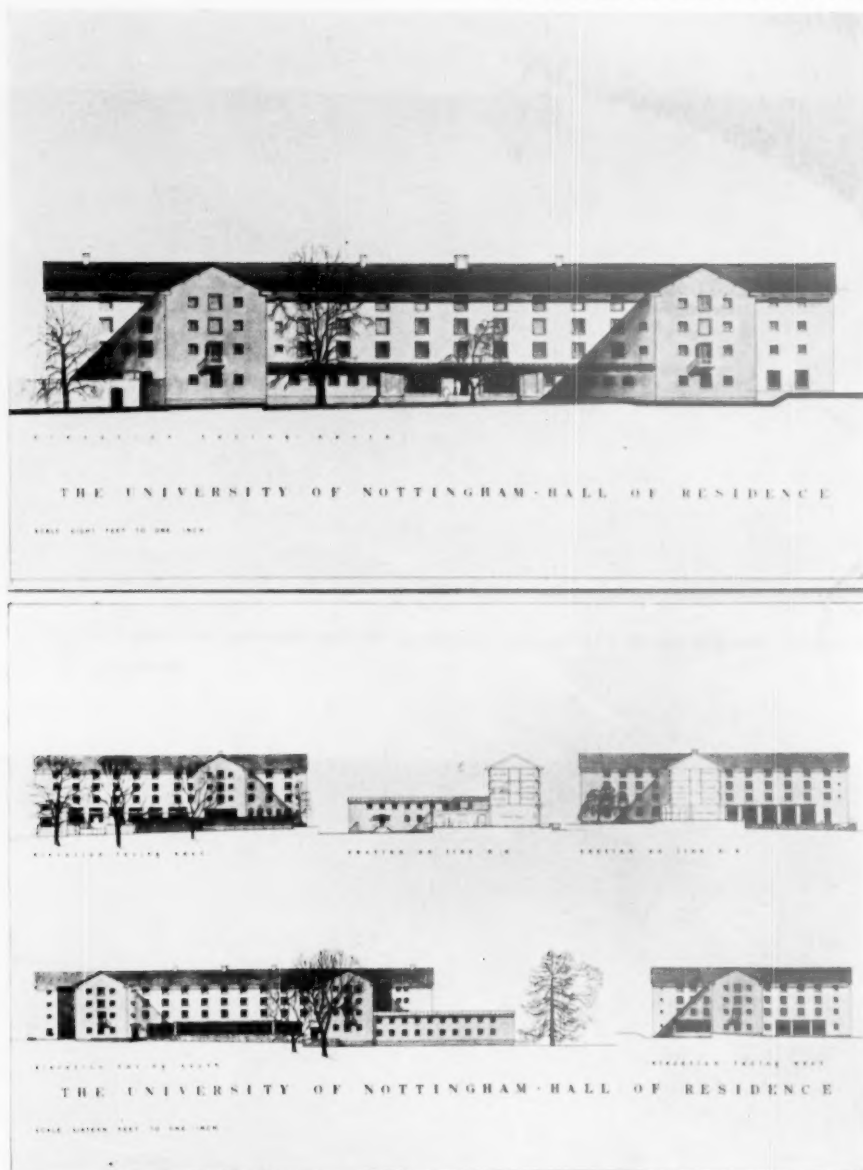
drawn by R. Myerscough Walker



Ramsgate: Newington County Primary School (Infants) for the Kent Education Committee : Howard Lobb
drawn by R. J. Thring



Junior School, Birchen Coppice, Kidderminster: F. W. B. Yorke and H. M. Barker in association with
F. R. S. Yorke, E. Rosenberg and C. S. Mardall
drawn by Jeffrey Webb



The winning design by Messrs. Turley and Williamson

COMPETITION RESULT

Hall of Residence, University of Nottingham

- 1st (Premium of £1,000): Messrs. Turley and Williamson, 14 Eldon Place, Newcastle-upon-Tyne.
- 2nd (Premium of £750): W. F. Howard, 110 Old Brompton Road, London, S.W.7.
- 3rd (Premium of £500): Messrs. Meade Taylor and Wilson, 17 Sheffield Terrace, Campden Hill, London.

Extracts from the Report of the Assessor: Sir Percy Thomas, P.P.R.I.B.A.

THE problem was not an easy one. Many competitors appeared to have allowed their building to sprawl and take up an undue amount of space, thus restricting the area left for gardens and recreation, whilst others have made their plans much too "close" and compact and thus failed to take advantage of the fine natural site available.

There were two main problems—the planning of the "public" rooms (common rooms, library, dining hall, etc.) so that these rooms should have the proper aspect and be bright and cheerful, and the planning of the upper floors so that the study-bedrooms also should be light and airy and that the majority of them should have sunshine for at least some part of the day. The combination of these two requirements was not easy and often led to either the public rooms or the upper floors being badly planned.

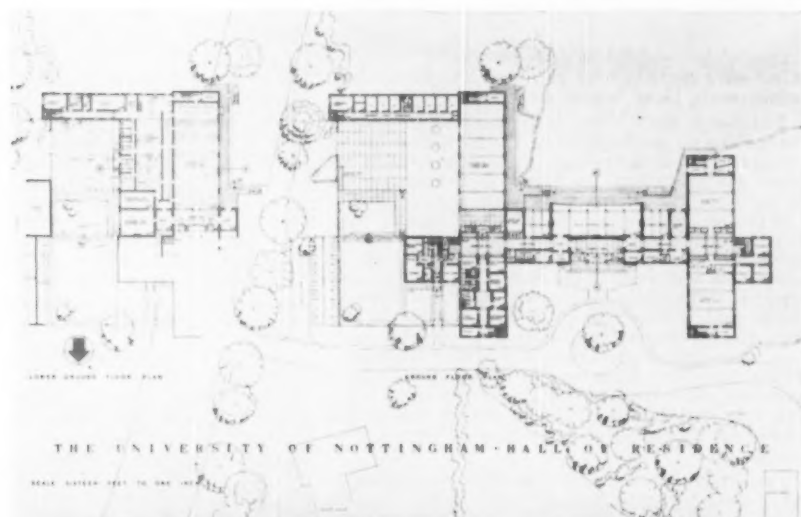
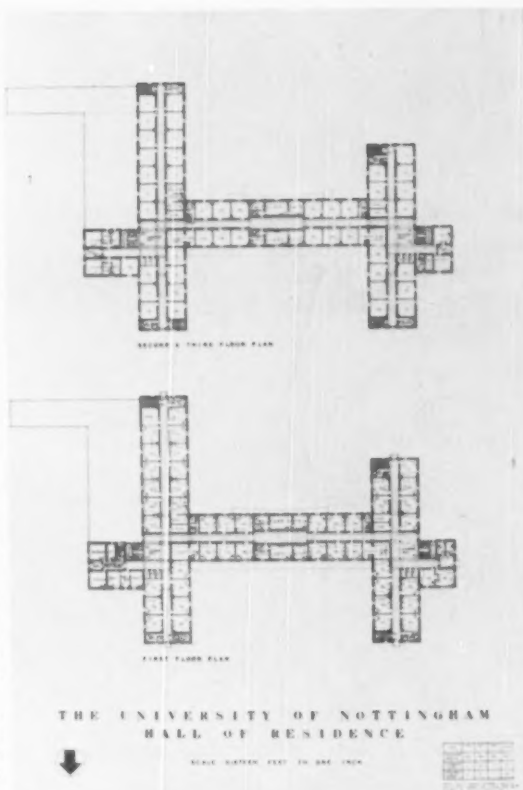
The 59 designs show almost every conceivable solution of the problem from small compact schemes to schemes which might quite well be suitable for a hospital or similar large institution.

The elevational treatment varies to an equal extent from the traditional "collegiate Tudor" to the very modern, neither of which in my view meets the wishes of your Council as expressed by clause 4 (a) of the Conditions.

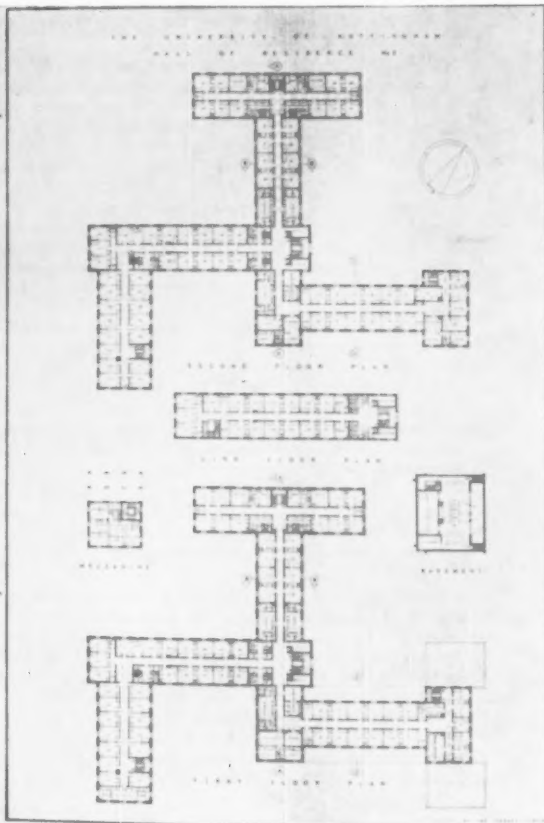
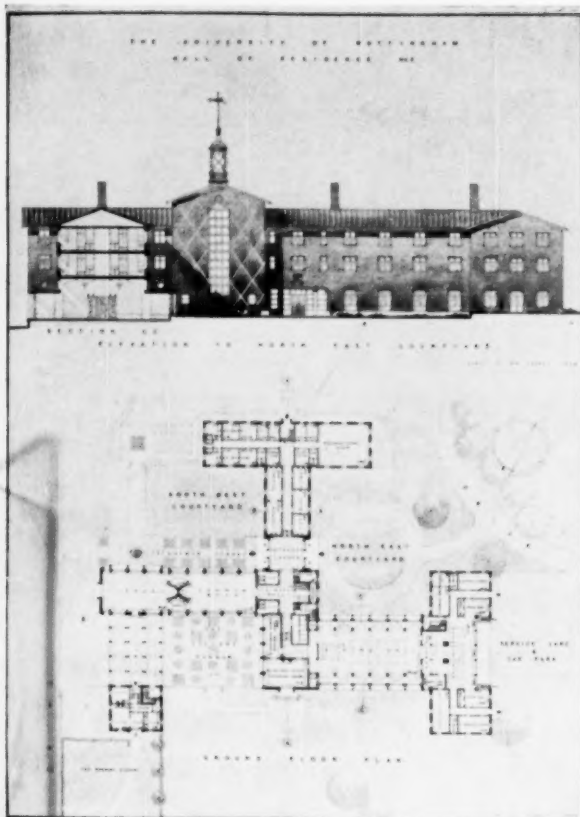
With regard to the layout, the schemes generally fall into two categories—with the four Halls arranged along the Beeston Lane frontage and the playing fields behind (as in the design placed first) or with the Halls grouped at the Southern end of the site with the playing fields at the northern end adjoining Derby Road.

It may well be that in view of the space taken up by this Hall of Residence (even in the best of the schemes) your Council may decide to provide a total of three instead of four Halls of Residence on this site and so

(Continued on p. 466)



plans of the winning design



design awarded the second prize, by W. F. Howard, F.R.I.B.A.

allow more space around each building for gardens, tennis courts, Dons' houses, etc.

The design placed first is an excellent solution of the problem set to competitors. The plan is neither too compact nor too sprawling. The public rooms are nicely placed looking south over a terrace and the dining room and kitchen arrangements are admirable. The accommodation for the Warden, Bursar, Vice-Warden and Lady Cook is conveniently placed and the upper floors are grouped around two main staircases which both lead down to the main Entrance Hall and corridor. The elevations are simple and well-proportioned and if nicely detailed should make a very attractive building and although a few of the bedrooms have north light and the bath and lavatory accommodation is rather inadequate, on the whole I have no hesitation in awarding this design the first prize. The estimated cost is £222,698 with an additional £8,395 for the layout of grounds, squash courts and garages.

The design placed second is not quite so compact as the first but has many good qualities. There would be a tendency for most of the students to use the main staircase. On the other hand, most of the bedrooms are arranged on two floors with only a small number

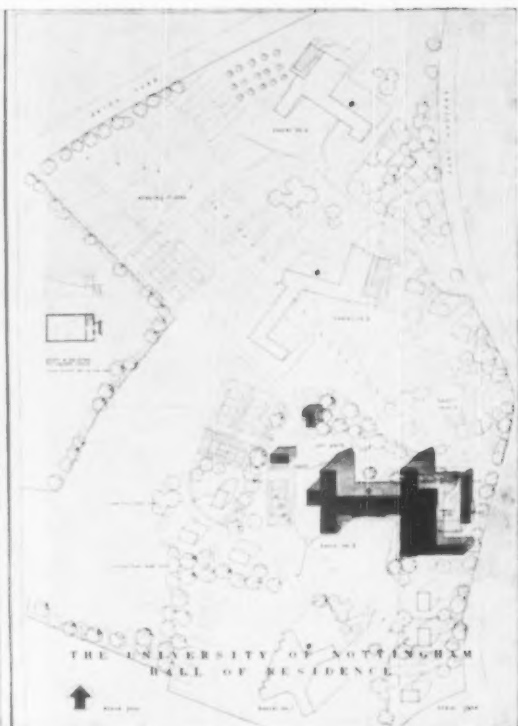
on a third floor. The Dining Hall and kitchen arrangements are not as good as in the scheme placed first. The elevations are excellent and the estimated cost is £249,829 with an additional sum of £17,500 for layout of grounds, garages, etc.

The design placed third is a good well-planned scheme with the various units well placed and the star-shaped upper floors provide excellent accommodation for the study-bedrooms. The estimated cost is £230,500 with an additional £4,000-£5,000 for the layout of grounds and ancillary buildings.

I would like to commend very highly the following designs: Numbers 56, 29, 9, 52, 48, 16, 24, 4.

The highly commended designs were submitted by the following competitors:

- No. 56. Messrs. Taylor and Holt, Bristol.
- No. 29. Messrs. Cecil Howitt and Partners, Nottingham.
- No. 9. David du R. Aberdeen, Esq., London.
- No. 52. C. Hyde, Esq., Nottinghamshire.
- No. 48. L. H. Bucknell, Esq., London.
- No. 16. The Peter Durham Group, Luton.
- No. 24. Messrs. Easton, Perlston and King, London.
- No. 4. A. D. Geach, Esq., Cornwall.



Above: site plan of the winning design.

Below left: 2nd prize.

Below right: 3rd prize



CONVERSION OF OAST HOUSES INTO COTTAGE IN HAMPSHIRE



architect :

SECTION A-A

RACHEL CARO, A.R.I.B.A., A.M.T.P.I.

[T] was intended to disturb the character of the building as little as possible with the conversion, whilst the full extent of the development was to comprise of two of the four kilns, and a small barn which adjoined but was not connected; whilst the main barn was to be left untouched.

The kilns which abutted on the tangent, each had a diameter of 17ft. 6ins. and a central circular oven occupying at ground level, the whole interior space excluding a walk of 3ft. 6ins. wide right round. The oven, which consisted of a labyrinth of cells, was corbelled over to meet the 13in. outside wall about 15ft. from the ground, and from here, the outside wall decreased to 9ins. thick. The hop floor was found just below the commencement of the roof scaling, and this consisted of a hair cloth mat stretched over an iron bar grid. Here it was that the damp hops were thrown to be dried by the oven below. Unfortunately, the roof ventilators had already gone before the conversion was contemplated.

The planning quickly fell into position. Connections were made between the three abutting buildings, the wall of one of the ovens was used as part of the staircase and cloakroom walls. It became immediately obvious that the kitchen and bathroom must be housed in the small barn, as here were the only straight walls.

The oven of the second kiln had to be completely dismantled, but here the iron grid was lowered to form the reinforcing to the 6in. reinforced concrete floor. This method, however, could not be adopted for the staircase kiln, where a wood joist floor was used. The staircase was constructed with shaped timber treads and risers carried on a 4½in. skin wall either side, thus obviating the need for a carriage.

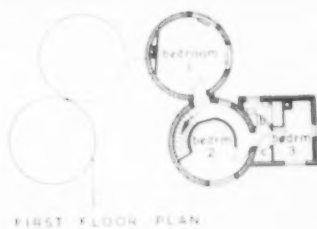
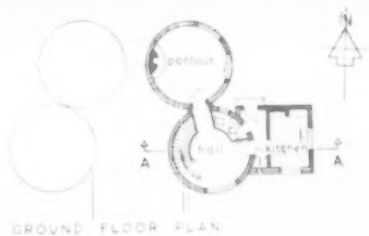
The windows are standard steel bay type, in four sections, adjusted on the mullions to the diameter of the kiln wall, and fixed in a wooden frame. Most of the ground floor and the bedroom floor are finished in ½in. pitchmastic, and the skirting is wood, whilst the kitchen and entrance lobby floors are finished with 6in. red quarry tiles. The domestic hot water is provided by a back boiler to the Welstood cooker in the kitchen, whilst a boiler behind the Siesta stove in the parlour, heats two radiators in that room and two in the principal bedroom above.

* * *

Top left: The staircase looking down. The ledge was formed when the arching of the oven was removed. The stairs are in timber carried each side on a 4½" skin wall.

Bottom left: siesta stove set in fireplace composed of 6×3×1½ Sussex briquettes. On the opposite page the barn is shown with the original roof and half-timbered gable, but owing to poor footings the rest of the walls of the barn had to be rebuilt.



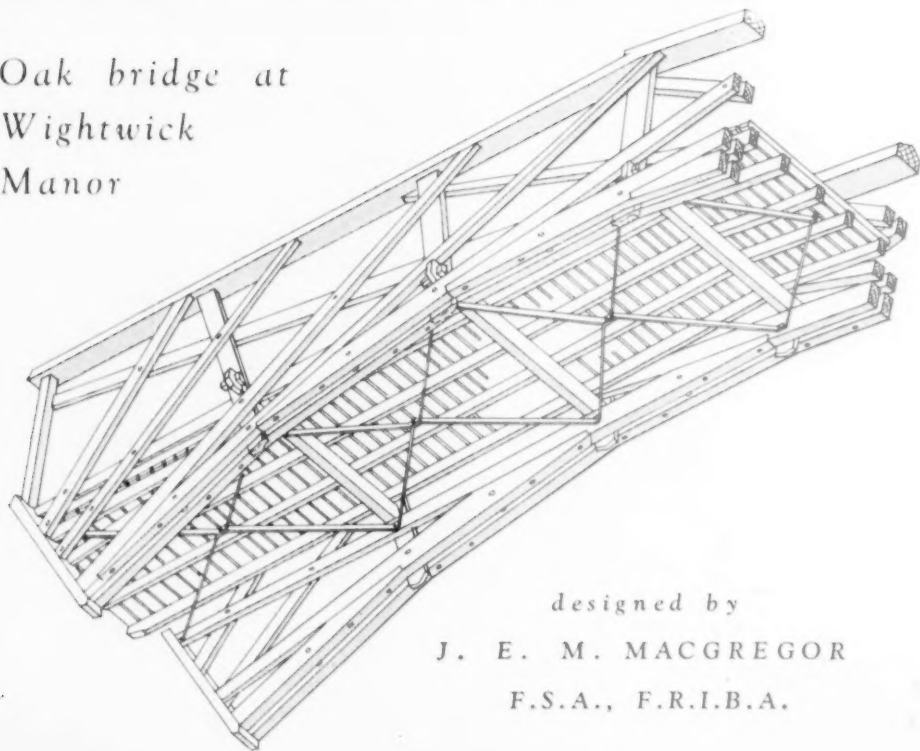




The original bridge at Wightwick Manor, Wolverhampton, was in deal. It had been modelled on that at Queens' College, Cambridge. This bridge had decayed and the need for rebuilding gave the architect the opportunity to re-design to a span half-as-wide again as the earlier bridge.

Economy in the use of timber was a "must", and each member (English oak) tapers from 6in. by 3in. to 3in. by 3in. Bull-dog connectors have been used, and all bolts are sherardised. The work was carried out by Henry Gough and Son Ltd., of Wolverhampton.

Oak bridge at
Wightwick
Manor



designed by

J. E. M. MACGREGOR

F.S.A., F.R.I.B.A.

SUMMARIES OF THE TWO BUILDING REPORTS

WORKING PARTY REPORT: BUILDING

"Our principal conclusions and recommendations are as follows:—

PRODUCTIVE EFFICIENCY

1. During 1946 and 1947 productive efficiency in the building industry was about two-thirds of its pre-war level; by the end of 1948 it was about three-quarters; there are indications of a further improvement. The combined effect of lower productivity, higher wage rates and higher cost of materials was that building costs generally throughout 1948 and 1949 were about two and a half times those of 1939.

2. The fall in the level of productive efficiency was due to the great reduction in the building labour force during the war, its rapid increase to almost the pre-war level immediately afterwards, the dislocation of managements during the war, the launching of a building programme greatly in excess of existing resources, the subsequent changes in this programme, the delays and uncertainties owing to shortages and controls, the compulsory use of untried materials, and the inflationary condition of the country's economy. Most of these are temporary and efficiency is slowly recovering; there are, however, two new factors which affect efficiency: "full employment" and planning controls.

3. Full employment means the absence of the large reserve of unemployed labour previously available; the industry must adjust itself to this.

BUILDING PROGRAMMES AND CONTROLS

4. Existing arrangements for issue of licences and permits cause delays and uncertainties which are inimical to efficiency and make pre-planning of jobs impossible; a determined effort must be made to remedy this. Frequent modifications of the general building programme disorganise the industry.

CONDITIONS FOR IMPROVING EFFICIENCY

5. To raise productive efficiency above its pre-war level:—

(a) All concerned in building operations should co-operate fully in everything that helps to improve efficiency, and to extend the advantageous use of the appliances, methods and materials which scientific and technical advances place at their disposal.

(b) Building operations of any size must be completely pre-planned.

(c) Building research must be efficiently organised and the results made widely known.

LAYOUT AND PERSONNEL OF THE BUILDING INDUSTRY

6. The existing layout of building concerns provides the necessary flexibility and variety of capacities required by building operations; no change in the craft basis is suggested, though greater interchange between crafts would be of advantage. For the personnel of the industry the need is to develop training schemes for all grades. Craft apprenticeship under proper indentures has been encouraged though much remains to be done. The selection and training of foremen require further attention. University courses for future building managers need to be extended and coupled with adequate pay and prospects for those who have successfully completed their courses.

7. In view of the control which the architect exercises over building operations, it is important that his training should give him adequate knowledge of the practical aspects of building; he should be prepared to adopt new materials and methods wherever appropriate.

8. Government Departments which control much building work have a special responsibility in regard to efficient practice; to ensure that full advantage is taken of new developments, technical advice on building matters should be provided by one technical Department.

REGISTRATION OF BUILDERS

9. No general scheme of qualitative registration is recommended to the industry; the present registration of employers should continue for statistical purposes; some form of registration in the plumbing and electrical trades is desirable; the National Housebuilders' Registration Council performs a useful function.

DIRECT LABOUR ORGANISATIONS

10. The conditions under which direct labour departments of Local Authorities should operate are laid down in satisfactory terms in a Memorandum* on the subject issued by the Ministry of Health and should be adhered to.

CONTRACT ARRANGEMENTS IN THE INDUSTRY

11. Before a contract is let the contractor should be furnished with full working drawings from which bills of quantities can be prepared.

12. More general adherence to a standard form of building contract is required; Government Departments should adopt a standard form.

13. The number of nominated sub-contractors should not be un-

necessarily multiplied. When nominated sub-contractors are employed they should if possible be selected after competition, and, save in certain special cases, design should be by a consultant firm.

THE MANAGEMENT OF BUILDING OPERATIONS

14. Before starting work on a site the builder, with full knowledge of the operation he is going to undertake, should draw up a programme of work. Site organisation should then be carefully planned as regards supply of materials and tools, correct balance of operations and labour, and in all other respects: the progress of work should be compared periodically with the programme and necessary adjustments made. Work Studies can assist management particularly by reducing the amount of wasted time.

INCENTIVE SCHEMES

15. Incentive payments are essential if output is to be adequately increased.

JOINT PRODUCTION COMMITTEES

16. Joint production committees are valuable.

SAFETY AND WELFARE

17. Adequate safety and welfare facilities are an important means of securing production: a standard is now prescribed by the industrial Code of Welfare and by a Factory Act Regulation.

COSTING SYSTEMS

18. Adequate costing is an essential factor in management, in promoting efficiency in the use of labour, materials and plant, in controlling overheads, and in providing information for tendering. A uniform costing system is impracticable; a report on costing systems is printed in Appendix D.

THE MATERIALS AND METHODS EMPLOYED

19. The distribution of building materials and components has recently been examined by a Committee of Inquiry appointed by the Minister of Works. More economical use of building materials is essential if costs are to be lowered.

20. Greater use of British Standard Specifications should be made. There is scope for further standardisation.

21. Codes of Practice are valuable.

MECHANICAL AIDS

22. Mechanical aids appear to be used where available and profitable. It would be of advantage if the service of plant hiring firms could be extended. Greater use of power-driven tools on site is desirable.

BYE-LAWS

23. Model Series of Building Bye-laws should be kept up to date and promptly amended; they should take account of British Standard Specifications and Codes of Practice.

RESEARCH

24. In the selection of subjects for research representatives of the industry should be fully consulted and given opportunities for making suggestions. Actual conduct of research should be carried out in the main by organisations of primarily scientific character. Effective arrangements should be made to present research results so that they can be readily applied in practice. The Ministry of Works has special responsibilities in the field of research.

BUILDING FINANCE

25. The industry appears generally satisfied with existing arrangements for financing the builder; prompt payment by the building owner of sums due is essential. A difficulty about performance bonds is at present the subject of negotiation. The question of securing to nominated sub-contractors payment due to them should be further examined by the parties concerned.

THE BUILDING INDUSTRY OF OTHER COUNTRIES

26. The building industry can profit greatly from the visit to the U.S.A. of the building team sponsored by the Anglo-American Council on Productivity.

27. Contact should be made with other countries on the lines of the visits to Sweden and the Netherlands; the industry itself might maintain closer touch through employers' and operatives' organisations."

(Signed) T. W. PHILLIPS, Chairman.

G. C. Allen, J. Armstrong, Hugh Beaver, G. M. Burt, R. Coppock, H. Drake, Luke Fawcett, H. B. Kerr, J. McInnes, S. John Pears, W. T. Porteous, B. Sandercock.

W. T. Lewis, Secretary.

11th January, 1950.

* Issued by M.O.H. to local authorities in England and Wales in November 1946.

PRODUCTIVITY TEAM REPORT: BUILDING

The Productivity Team from the British Building Industry which last year visited the U.S.A. has issued a unanimous report* which contains far-reaching proposals for increasing productivity in this country. The Report, which is illustrated with numerous photographs and diagrams, examines in great detail the organization, constructional techniques and psychology of the industry in America.

Separate chapters of the Report discuss:

The structure of the industry in America.

The architect's contribution to productivity.

American and British tendering procedure.

The contractor's organization.

Constructional techniques and the use of materials.

Industrial organization and labour relations.

Labour productivity and recruitment.

Housing.

The most important, but not the only, factors which make for high productivity in the U.S.A. are stated to be:

(1) The complete pre-planning of the job by building owner, architect and contractor;

(2) The proper co-ordination of sub-contractors' work and the effective collaboration between them and the general contractor;

(3) The adequacy of the supplies of labour and materials and the absence of restrictive controls;

(4) The general availability and use of mechanical aids;

(5) The recognition of the importance of continuous research into the production of materials and into building techniques;

(6) The nation-wide stimulus of the American industrial climate, which has a great effect on the output of every individual and which is shared by all members of the building industry. This last reason, it is added, is perhaps the most important of all.

Apart from the adequacy of supplies of materials, all these influences towards higher productivity can be developed in the British industry by its own efforts.

The following are specific recommendations:

PRE-PLANNING

(1) Establishment of full confidence between architect and client on a business basis and the definite settlement at an early stage of the client's requirements—particularly in the case of Government departments—so that

costly and time-wasting variations in the work are eliminated and the speedier final settlement of accounts is facilitated.

(2) Preparation of designs which have regard to ease of construction and saving of cost, are based as far as possible on standard dimensions, and take into account types of material and equipment available.

(3) Completion, before the tender stage, of all essential working drawings, specifications and schedules, and their issue to tenderers as far as is necessary.

(4) Issue to the main contractor of all information necessary for letting sub-contracts and for the placing of orders with nominated suppliers immediately his tender is accepted.

(5) More careful selection and better training and payment of clerks of works.

CONTRACT ORGANIZATION

(6) Constructional work should not be started until the organization of the job has been worked out to the most advanced stage possible. Pressure to begin work on the site prematurely should be resisted.

(7) The general contractor should regard proper co-ordination of sub-contractors as one of his most important functions.

(8) Simplified time and progress schedules should be circulated widely through the job, and to them all sub-contractors and any direct contractors should be required to conform.

(9) Sub-contractors responsible for the services should start work at an early stage and install fittings, etc., conformably with the progress of constructional work, care being taken, as in U.S.A., by all employees to preserve from damage work placed in position.

(10) Schemes for selection and training of supervisory staff should be reviewed.

(11) The use of appropriate costing systems.

(12) Encouragement of the maximum economic use of mechanical aids.

MATERIALS and SERVICES

(13) Adequate supplies of timber at a reasonable price. The use of unsuitable timber and substitute materials increases cost.

(14) The whole question of the quality control of concrete should be examined and, in particular, its specification by performance and quality, i.e., by compressive strength in lb. per square inch, instead of by volume or weight. Other suggestions are for the use of transit mixed concrete in the major centres, of air-entrained concrete, and concrete blocks of suitable aggregates.

(15) Certain of the industries manufacturing building materials should consider sending Teams to U.S.A.

(16) A further and more detailed study of American plumbing practice would be valuable.

GOVERNMENT DEPARTMENTS

(17) Government Departments responsible for licensing and for materials and other controls should continually review the possibility of relaxing or eliminating them; job organization may be ruined by official requirements that certain materials are not to be delivered until the end of a particular licensing period.

(18) Removal of controls over the prices of basic materials with a view to their eventual stabilization.

(19) Simpler and quicker procedure for the revision and unification of by-laws.

(20) More energy giving foods for operatives.

(21) Propaganda to inculcate safety mindedness. Permission for the use of simplified and more economical forms of scaffolding might follow a further examination of American requirements and practice.

The Report urges the responsible authorities to take all possible steps to make available adequate supplies of essential materials, especially timber, and to ease or remove existing onerous restrictions on private enterprise housebuilding, for sale and rental. The American housebuilding industry, freed from all controls, can, it states, provide houses for a large proportion of the population at prices commensurate with their average annual family incomes.

Other recommendations deal with the settlement of intermediate and final accounts, the simplification of the Standard Method of Measurement and the apprenticeship system.

COMING EVENTS

A.B.T.

- May 10, at 6 p.m. At the Building Centre, 9 Conduit Street, W.1. "Open Evening" and Film Show: "A City Reborn" and "Heating Research for Houses."

I.M.B.A.

- May 9, at 2.30 p.m. South-Eastern Area Luncheon Meeting, Eden Park Hotel, Upper Elmers End Road, Beckenham. Guest of Honour: R. R. Costain.

EXHIBITION

- May 8-12. Exhibition of Paintings, Sketches and Photographs by members of the I.A.A.S., at 75 Eaton Place, London, S.W.1, 10 a.m.-5 p.m.
- May 8-19. British Industries Fair at Birmingham, Olympia and Earls Court.

ON THE AIR

- May 7, at 12.10 p.m. in the Home Programme. In the "Critics," Mr. Howard Robertson will speak on "Architecture in the Royal Academy."

*Price 2/6 from the R.I.B.A., 66, Portland Place, W.1; or The N.F.B.T.F., 82 New Cavendish Street, W.1, and H.M.S.O.

B.I.F., BIRMINGHAM, MAY 8-19

SPACE does not permit publication of a detailed forecast of exhibits at the British Industries Fair which opens at Castle Bromwich, Birmingham, on Monday, May 8. The following notes, compiled from advance information sent to us by some of the many exhibiting firms, aim at selecting items which are new or recent additions to a firm's products. In the main these notes are restricted to the building and allied trades sections.

Stands are indicated by letter referring to the section as follow: A—hardware, B—building and heating, C—electrical, D—engineering and outdoor. Stand numbers refer to avenue numbers in the Fair building. Thus stand 704 is in avenue 700; stand 425 is in avenue 400. From the L.M.S. railway entrance the sections are in sequence A to D.

Section A

JOHN HARPER & CO. LTD.

Stand A334
The gas appliances on this stand include a pleasing design of portable convector radiator. The gas rate is governed to 10 cubic feet per hour. Town or liquid gas may be used.

ARTHUR HOLDEN & SONS LTD.

Stand A424
Stress is being laid on the firm's Oil Proof Machinery Paint. Other exhibits are a range of industrial finishes.

ALADDIN INDUSTRIES LTD.

Stand A428
Attention is centred on a new product—the Bialaddin Table Lamp.

NUWAY MANUFACTURING COMPANY LTD.

Stand A610
Fibred-rubber link matting will be on display.

LACRINOID PRODUCTS LTD.

Stand A623
Products shown include plastic door furniture and housing fittings.

Section B

"TWISTEEL" REINFORCEMENT LTD.

Stand B309 208
This firm are exhibiting their reinforcement on the stand of Industrial Smethwick.

BRITISH CORK MILLS LTD.

Stand B211
Overseas buyers will be interested in this company's Corkboard for lower temperature insulation in cold stores, etc.

RANGE BOILERS LTD.

Stand B300
The adaption of this firm's patent combination tank (which incorporates cold water supply tank and hot water cylinder in one unit) to the indirect method of hot water heating in smaller type houses is a feature of interest.

DEXION LTD.

Stand B306
Slotted metal angle, re-usable and highly adaptable to a number of constructional uses may be seen on this stand. Skilled labour is not required.

C.S.A. INDUSTRIES LTD.

Stand B313
A combined dressing table wash basin unit in aluminium is a new addition to this firm's range.

HENRY HOPE & SONS LTD.

Stand B415 318
A school window of new type will be on the stand for demonstration.

EVERED & COMPANY LIMITED

Stand B327
Here are new patterns, in a range of colours, of builders' and cabinet hardware.

G. A. HARVEY & CO. (LONDON) LTD.

Stand B329
Architects, contractors and industrialists are catered for in the very embracing range of metalwork exhibited by this firm.

RADIATION LTD.

Stand D545 & 442
Stand B400 & 501
Large scale cooking apparatus suitable either for town or natural gas is in section D. Equipment for home and export trade is being developed for use with liquefied petroleum gas. In this range is the firm's new pressure steaming oven shown for the first time at the Hotel, Restaurant and Catering Exhibition.

On the solid fuel stand No. B400, 501 there will be the Yorkseal heat retention cooker which has not been shown before.

ASTON BRASS COMPANY

Stand B401
A range of British Standard Taps and Wastes is among the products on display here.

J. H. SANKEY & SONS LTD.

Stand B405
Heat and acid-resisting material are the feature of this stand. Exhibits include bricks, chimney pots and fire and acid resisting cements.

S. J. DOWNHAM & CO. LTD.

Stand B406
This firm will be showing their latest models of bathroom furnishings and fittings.

THE BRITISH PLASTER BOARD LTD.

Stand B511 410
The use of Gypsum materials in modern building construction and the need for good plasterwork are the keynote of this exhibit.

A. BELL & CO. LTD.

Stand B420
A new range of faience and tile fire-places which includes a new patent convector fireplace, may be seen, as well as a new series of handpainted tiles in blue, sepia and colours.

PEGLERS LTD.

Stand B421
This firm is putting on a wide display of finished brasswork for plumbing and engineering, including their "Prestex" specialities.

THE RUBEROID COMPANY LTD.

Stand B423
On a stand designed by Eric Brown and Peter Chamberlin, this firm are showing full size models of various ruberoid products for building uses.

THE STAINLESS STEEL SINK CO. LTD.

Stand B504
A range of stainless steel sink units on this stand has been designed specially to suit the needs of the North American market. In addition there will be samples of the firm's full range.

TRIPLEX FOUNDRY LTD.

Stand B505
Shown for the first time: the No. 38 C.F. Grate. Also shown: the "V" Cooker. Both will be working on the stand.

WALLIS & CO. (LONG EATON) LTD.

Stand B510
This firm has new items in their kitchen equipment range. These are: open shelf type corner units which enable corner wall cabinets to be used without loss of space.

FREDK. BRABY & CO. LTD.

Stand J B611 508
The stand itself is a major part of the firm's exhibit incorporating metal windows, partitions, doors and dovetail sheeting. Other metal products including pressed steel stairs, door frames, gutters, etc., are shown as free standing exhibits.

LEWIS BERGER (GREAT BRITAIN) LTD.

Stand B621 518
This display shows finishes for the metal, plastic, and wood manufacturing industries: insulating varnishes for electrical industries and new surface coatings for use in the transport industry.

RUBERY, OWEN & CO. LTD.

Stand B524
New ranges in sink units, the "Princess" in porcelain enamel and the "Duchess" in stainless steel—both are mounted on newly designed cabinets and are shown by Esiclene Porcelain Enamel Ltd., an associated company.

Another associated company, Gasel Appliances Ltd., will be showing a refrigerator designed by Mr. Grey Wornum, F.R.I.B.A. This refrigerator operates by gas, kerosene or electricity.

CELLON LIMITED

Stand B527
A pre-treatment primer to counteract corrosion on aluminium and its alloys and other metals can be applied by brush or spray. The firm's range of paints for building, industrial and other special purposes is also shown.

CHUBB & SON'S LOCK AND SAFE CO. LTD.

Stand B609
A new range of locks, including the new rivetless brass open and close shackle padlock which is for export will be shown.

GUEST, KEEN & NETTLEFOLDS (MIDLAND) LTD.

Stand B629 & 1321
Screws, bolts, nuts, hinges, etc., will be shown on B629. Heavier goods exhibited by the G.K.N. group will be shown outside on Stand 1321 which is close to B629.

JAMES H. LAMONT & CO. LTD.

Stand B630
Compression joints for copper tubes with illustrations of the firm's fittings as used on copper tubes to B.S.S. 1386, 1947 for underground use on gas installations will be shown.

There will also be a model house fitted with a complete hot and cold water installation.

W. H. COLT (London) LTD.

Stand B721
This firm claims that ceilings and walls based on their electrically kilned plaster lathing will not crack. This lathing will be exhibited.

Colt Ventilation Ltd. is exhibiting models of industrial ventilators. The Inflow Unit Ventilator is exhibited for the first time.

Section C

THE JACKSON ELECTRIC STOVE CO. LTD. Stand C411 310

Prominence is given to recently modified designs of the firm's range of electrical cooking apparatus—domestic and large scale.

W. T. HENLEY'S TELEGRAPH WORKS COMPANY LTD. Stand C413 & 312

Of interest to local authorities and engineers: Super tension cable installations.

This is the Cable Makers Association stand.

BRITISH INSULATED CABLES LTD. Stand C314

Here will be a prominent display of cables and wires. Aluminium sheathed cables are now available in a range of sizes and types.

GENERAL ELECTRIC COMPANY LTD. Stand C503 402

A three feature display on this stand will deal with (i) airport lighting equipment, (ii) street lighting equipment, (iii) motors, motor control gear and accessories.

EKCO-ENSIGN ELECTRIC LTD. Stand C403

Fluorescent lighting fittings of various types and sizes will be on view.

E. K. COLE (THERMOVENT HEATING) Stand C403

Thermovent heaters, which the makers state can be built into walls and furniture with complete safety and without wall blackening will be on this stand.

BAKELITE LTD. Stand C404

The travelling exhibition of "Bakelite," "Waverite" and "Vybak" plastics which has already been in London, Brussels, Oslo and Stockholm will now be seen in Birmingham.

The samples of finished products shown in this exhibition illustrate the solidity and quality of finish which can be obtained when plastics are properly designed.

BERRY'S ELECTRIC LTD. Stand C507 406

The firm informs us that many new lighting fittings have been added to their range. Heating and switchgear fittings and a new immersion heater will also be shown.

GENT & CO. LTD. Stand C407

B.I.F. Time Gents Please: all clocks throughout the Fair are controlled from a master clock on this stand.

BRITISH THOMSON-HOUSTON COMPANY LTD. Stand C511 410

Fluorescent lighting employing newly developed coloured fluorescent lamps as well as the more familiar colours is one feature on this stand. Attention is also drawn to a new 100 watt tungsten filament lamp which has a coating of silica. It is claimed that this diffuses, without appreciably reducing, the light given.

In the wide range of equipment shown there are several items with new features. Entirely new are (i) a 3.3 kV flameproof contactor unit, (ii) a number of small power motors.

GILLOTT ELECTRO-STEAM COOKERS LTD. Stand C416

A new cooker is to be shown. The design includes an 8" diameter radiant type boiling plate with simmerstat control; a 10" x 8" grill with 3 heat control and 2 steaming wells. There is also a boiling water supply, an oven and two hot cupboards.

NEW DAY ELECTRICAL ACCESSORIES LTD. Stand C416

The whole range of this firm's accessories has been designed and developed to standardized requirements since 1946.

FALK, STADELMANN & CO. Stand C419

A new design in switchboxes will be shown. These are cast in iron with hard black enamel finish.

There are also three new designs in fluted clear "Perspex" for use in diffusing screens in connection with fluorescent lighting.

RHEOSTATIC COMPANY LTD. Stand C500

This stand exhibits a complete range of Automatic Temperature Control Devices.

BRATT COLBRAN LTD. Stand C504 (Electrical) Stand D656, 757 (Gas)

Displayed for the first time at Birmingham: (a) two bar electric panel fire and (b) the gas burning incinerator, a photograph of which has appeared in this paper.

THE HOTPOINT ELECTRIC APPLIANCE CO. LTD. Stand C513

1950 products of this firm will include a re-styled washing machine which incorporates a thermal overload safety device for A.C. circuits. Shown for the first time is their latest refrigerator which has a plate glass working surface.

FERRANTI LTD. Stand C615 & 514

Water heating and space heating will this year be a feature of this stand. Photographs of a recent space heating installation in a nursery school will be shown.

THORN ELECTRICAL INDUSTRIES LTD. Stand C517

In a representative range of fluorescent lighting equipment for all types of building, a newly designed 5 foot single lamp fitting which incorporates a press moulded opal "Perspex" trough with the control gear neatly arranged on the top.

CHANCE BROS. LTD. Stand C622 & D540

A square beam airport location beacon is being exhibited for the first time. This is approved by the Air Ministry for standard use in British Civil Airports.

CROMPTON PARKINSON LTD. Stand C609

Stud welding equipment and a new range of fluorescent lighting fittings are perhaps the exhibits of chief interest to the building industry on this stand.

S. O. BOWKER LTD. Stand C705

A new 15 amp 3 pin shallow Switch Socket which will be on view is expected to be available for delivery shortly after the conclusion of the Fair.

THE RAWLPLUG COMPANY LTD. Stand C707

Rawloos, rawlites and rawclips are exhibits which should be seen by those who do not already know them.

L. G. HAWKINS & COMPANY LTD. Stand C723

Labour saving electric domestic appliances in great variety include a flexible desk lamp with a heavy cast base incorporating an ash tray.

Section D

THE BRITISH VACUUM CLEANER & ENGINEERING CO. LTD. Stand D203 102

Vacuum cleaning for larger buildings by means of suction point attachments in the structure is the feature of this stand.

IMPERIAL CHEMICAL INDUSTRIES LTD. Stand D107 (Plastics Division)

This display is designed to give information particularly to the engineering trade: a new "Alkathene" for use as an anti-corrosion membrane for floors will be shown.

B.B. CHEMICAL CO. LTD. Stand D108

"Bostik" and "Prestik" are two different forms of adhesive, the former being well known for its war-time as well as its peace-time virtues. "Prestik" is in extruded form for use in glazing and other positions where a resilient seal is required.

NORTH BRITISH RUBBER CO. LTD. Stand D138

First post-war appearance at the Birmingham section. In addition to coloured rubber tiles and flooring there will also be shown conveyor belting, hose, mouldings and extrusions.

R. A. LISTER & CO. LTD. Stand D205

Auto-trucks of various sizes are to be shown. All trucks are fitted with NU9G Power and Steering Unit and have a gear drive from gear box to front wheel.

STELCON INDUSTRIAL FLOORS LTD. Stand D215

Samples of the firm's storage wall units will be shown on a stand floored with "Stelcon" steel plates.

LINREAD LIMITED Stand D221

Bolts, screws, nuts, etc., and exhibits to demonstrate cold forged products will be shown.

COPPER DEVELOPMENT ASSOCIATION Stand D230

A technical advice service is offered to all users of copper for building, scientific or other purposes.

A.C.E. MACHINERY LTD. Stand D235 & 1209 1108 (outdoor)

The new tower mast hoist, a mobile machine with either petrol or diesel engine has a capacity of 10-12 cwt either as a two barrow platform or 3 cubic foot concrete elevator.

ROBERT JENKINS & CO. LTD. Stand D242

Here may be seen welded steel boilers, tanks, etc.

CONSTRUCTORS LIMITED Stand D401, 300

A well designed steel desk made up of standard units permitting numerous variations of arrangement including three different heights is one of several exhibits in a varied range which embraces steel shelving and a new type of office partition.

FIBREGLASS LIMITED Stand D312

An acoustically treated quiet room insulated with Fibreglass faced with perforated hardboard will be a feature of this stand.

THE YALE & TOWNE MANUFACTURING CO. Stand D423 & 324

Mechanical Handling Equipment in this exhibit includes: chain operated hoists, stacking machines, etc.

METALLISATION LTD. Stand D326

Metal spraying exhibits and examples of spraying equipment will be on view.

ASSOCIATED BRITISH COMBUSTION LTD. Stand D334

Among the exhibits shown is the Marine type oil fuel burner and a compact oxygen test apparatus.

JOHN THOMPSON (BEACON WINDOWS) LTD. Stand D521, 418

Introducing a new travelling grate stoker suitable for shell boilers.

RADIATION LTD. Stand D545 & 442

(See also Stand B400 and 501)

HALE & HALE (TIPTON) LTD. Stand D609 & 508

Interest for the building industry may centre on roof supporting devices used in mining but adaptable for building uses. Among these is the Hewitt wedge release which the makers feel may have many applications in the erection of temporary and reinforced concrete structures.

THE UNITED STEEL COMPANIES LTD. Stand D519

A general picture of the firm's steel producing activities will be presented through the medium of working models and samples.

SCHORI METALLISING PROCESS LTD. Stand D524

There will be a full sized demonstration of shot blasting and metal and plastic spraying on this stand.

BRITISH IRON & STEEL FEDERATION Stand D631 & 530

Exhibits here will take the form of a Central Forum of Information for the steel industry.

THE GAS COUNCIL

Stand D639 & 538

The use of gas as an industrial fuel is among features of interest on this stand which makes its first post-war appearance at Castle Bromwich.

CHANCE BROS. LTD. Stand D540

(See also Stand C622)

THE BRITISH ALUMINIUM CO. LTD. Stand D605

Aluminium and its alloys for various purposes will be shown here. Particular interest may attach to super purity aluminium sheet of 99.99% purity which is now available in substantial quantity for use in flashings and weatherings.

DOULTON & CO. LTD.

Stand D743 & 642

This exhibit is devoted to four branches of industrial ceramics: chemical stoneware, laboratory and technical porcelain, porous ceramic media and filter units; electrical porcelain for insulation.

THOMAS DE LA RUE & CO. LTD. Stand D612

The De La Rue stand deals entirely with industrial uses of plastics. The stand is paved with a new De La Rue tile.

HALL HARDING LTD.

Stand D749 & 648

Amongst other drawing office equipment a combined drawing board and cabinet appears, from the illustration, to be efficiently designed.

BRATT COLBRAN LTD.

Stand D656 757 (Gas)

(See also Stand C504—Electrical)

THE SPIRAL TUBE & COMPONENTS COMPANY LTD.

Stand D710

A selection from the company's wide range of spiral tube heat transmission equipment includes a miniature portable 3 k.w. all electric unit heater fitted with automatic thermal cut-out. There is a similar unit for wall mounting.

THOS. W. WARD LIMITED

Stand D719 & 1360 (outdoor)

Ten subsidiary companies will show the group's activities which include factory planning, installation, industrial dismantling, erection of structural steelwork, roadmaking, etc.

The outdoor stand will contain examples of machinery and industrial plant marketed by the Parent Company.

THE AIRSCREW COMPANY AND JICWOOD LTD. Stand D726

The firm introduces a self-contained Unit Dust Collector among exhibits of Air Conditioning equipment.

"Weyroc" boards in large sizes and in three grades, plain, paper surfaced and veneered, can be seen here. Boards are 8' x 4' and $\frac{1}{2}$ " or $\frac{3}{4}$ " thick.

Outdoor Section**THE BRITISH STEEL PILING COMPANY LIMITED.**

Stand 1103 1002 (outdoor).

A feature of this exhibit is an 80 ft

raking and rotating pile frame with sliding and adjustable leaders. The superstructure is hinged to the base and raised to vertical by a winch on the frame base. A 70' 0" pile can be pitched between the underside of the hammer and rail level. The whole plant operates and travels by power.

E. BOYDELL & CO. LTD.

Stand 1301/1200

Heavy duty dumpers, loaders and other plant are among exhibits on this stand.

SANKEY SHELDON LTD.

Stand 1321/1220

New products: (a) Steel partitioning with flush finish. (b) Unit equipment specially designed for accounting machines.

GEORGE COHENSONS & CO. LTD.

Stand 1334 & 1327/1226

Of the 7,500 square feet occupied by this group of companies a relatively high proportion will be occupied by wood-working machinery, metal working machinery and contractors' plant.

F. H. HUGHES & CO. LTD.

Stand 1339/1238

In addition to the magnesium anodes of standard type, which are fairly common in this country for the protection of buried pipe lines, new types of Elektron magnesium anodes will also be displayed, including a newly patented "booster anode" which is designed specially for the protection of structures in sea water.

FREDK. PARKER LTD. Stand 1300

The new products on this stand relate to asphaltting and road making. The firm's range of builders' equipment will also be on view.

Information Digest

● **B.R.S. Digest No. 16.** Issued by B.R.S., Garston, Watford Herts. Price 2d.
Domestic Heating by Solid Fuel.

This digest summarises the present position regarding the methods of heating small houses, in relation to the use of one or two solid fuel appliances designed to provide domestic hot water and heat for several rooms, in place of the former practice of providing several open fires throughout the house. The salient features of the different types of solid fuel space and water heaters designed for small houses are illustrated and estimated running costs for the various types of appliance are tabulated. These figures are based on the work in the various experimental houses built by the Building Research Station.

● **Governmental Publications. Sectional List No. 3.** "Department of Scientific and Industrial Research". Issued by H.M. Stationery Office.

This is a useful list of the Publications of the Department of Scientific and Industrial Research at present available, revised up to January 31, 1950. Publications out of print are available for reference in a number of National Libraries, and as knowledge in the possession of the D.S.I.R. is in general, freely available, any inquiries concerning relevant information in publications now out of print should be addressed to D.S.I.R., Dorland House, 14-16 Regent Street, London, S.W.1, for attention.

● **Ministry of Works Advisory Leaflets: No. 7, Concreting in Cold Weather. No. 8, Bricklaying in Cold Weather.** Issued by H.M. Stationery Office. Price 1s. each.

These leaflets describe the precautions to be taken when

bricklaying and concreting in cold weather. Notes are given on the different types of cement and the use of calcium chloride for the speeding up of the setting of Portland Cement in Leaflet No. 7. Leaflet No. 8 includes illustrations showing simple methods of warming brickwork, mortar and ballast in cold weather. Like previous M.O.W. Leaflets, Nos. 7 and 8 are designed for the small builder, clerk of works, and foreman, and they give information concerning latest developments in building practice in a concise and practical way. The tabulated information in Leaflet No. 7 is particularly useful, and would be of value to students.

● **National Building Studies.** Issued by H.M. Stationery Office.

Bulletin No. 9: Some Common Defects in Brickwork. Price 1/3d.

This little booklet by D. R. G. Bonnell and the late W. R. Pippard, both of the Building Research Station, illustrates graphically some of the things that can go wrong with ordinary brickwork. Six types of defect are described and illustrated by horrifyingly realistic photographs. Fortunately the authors follow each description by a lucid diagnosis, cause and remedy, with notes on ways of avoiding similar defects in new work. The photograph of the "crazy" chimney (distorted by sulphate attack) on page 8 has to be seen to be believed. This is an example of B.R.S. contribution towards better building construction at its best. It should be purchased and studied by every architect and student.

Technical Paper No. 4: Investigations on Building Fires. Price 9d.

This technical paper is divided into two parts. Part I "The Estimation of the Maximum Temperature attained in Building Fires from Examination of the Debris," by T. W. Parker and R. W. Nurse, and Part II "The Visible Changes in Concrete or Mortar Exposed to High Temperatures," by G. E. Bessey. The information contained in this report is based on the data collected during the investigation of a large number of fires in buildings. This work has been carried out by the Fire Testing Station at Elstree, Herts, since 1935.

Special Report No. 9: An Inquiry into Communal Laundry Facilities. Price 1/-.

As part of a general study of the housewife's work in relation to the design and construction of dwellings and their equipment, the Ministry of Works has carried out an investigation into the existing facilities in the country for washing clothes and household linen. Special Report No. 9 is based on the results of this investigation and information was obtained from Local Authorities concerning public wash-houses and the communal laundry facilities provided in local authority housing schemes. Housewives were interviewed both at home and in communal laundries to obtain practical information concerning the laundry problem and information concerning the extent to which public facilities were used. Some of the figures quoted by the report are interesting. 37 per cent. households in this country still use kettles, etc., to heat water for washing clothes. 40 per cent. of the households in the United Kingdom send sheets to the laundry and only 2 per cent. use the communal laundry facilities. Although public wash-houses are well patronised in large cities there is still a certain prejudice against them. The collection and delivery service instituted by the Manchester Corporation, if more widely adopted, would, no doubt, do much to increase the popularity of communal laundries. For architects concerned with the problem of planning such facilities in conjunction with large scale housing schemes the report gives useful advice on equipment, services, and the planning of communal laundries.

Special Report No. 10. New Methods of House Construction (2nd Report). Price 9d.

This Report is a supplement to Special Report No. 4. New Methods of House Construction. Four additional systems developed during 1947-48 are examined and compared with the nine systems dealt with in Special Report No. 4. The Report confirms the conclusions previously reached; that new methods of construction can produce considerable economies in man-power, and that these economies are greatest in any system with a high degree of prefabrication. As usual the cost question is still a matter for speculation, for as previously discovered the reduction in labour costs does not appear to result in a reduction in the cost of the completed house. The four new non-traditional house construction systems examined, included one of no-fines concrete cast in-situ, two of steel frame construction and one of storey height precast hollow concrete panels. No illustrations or drawings of the systems are included in the Report.

Housing, Town and Country Planning. Bulletin No. 3, February, 1950. Published by United Nations. Available from H.M. Stationery Office. Price 7.6d.

This bulletin is issued at irregular intervals by the United Nations Department of Social Affairs, and is designed to provide information on housing and related subjects useful for administrators, and technicians. It embraces as far as possible significant developments in all parts of the world. Bulletin No. 3 contains four signed articles on the U.S.A. Housing Programme; Housing and Town Planning in Belgium; Technical aspects of low cost housing in the Tropics; and the Vista Hermosa housing project outside Panama City. In addition there are summaries of reports on housing, etc., received from several countries, and a comprehensive 48-page annotated list of selected references from periodicals published during 1948 dealing with housing, town planning, materials and construction methods.

British Standards and Codes of Practice. Issued by the B.S.I., 24/28 Victoria Street, S.W.1.**British Standards Year Book 1949.** Price 5/- post free.

The 1949 Year Book of the British Standard Institute contains the latest information available up to December 31, 1948, and gives a note on all new and revised British Standards issued up to that date. The Year Book also gives membership lists for all the main Committees of the Institution, and other classified information relevant to current British Standards.

British Standard Code of Practice C.P. 342 (1950). Centralised Domestic Hot Water Supply. Price 8/- post free.

The Council for Codes of Practice for Buildings has now issued this code in final form. It comprises a head code and six subcodes as follows: Boilers, Calorifiers, Storage Vessels, Pipework, Electricity-driven Circulators and Thermal Insulation. The head code deals with central hot water supply in general, and the subcodes cover in detail the subject indicated by their titles. The codes give guidance at all stages, on the setting up and maintenance of installations designed for the provision of hot water for domestic buildings, ranging from the small house to schools and hotels. The drafting committee have assumed that the design of the domestic hot water system will be carried out by a competent engineer, and that it will be installed under qualified supervision.

Building Materials**Magazine of Concrete Research No. 3, December, 1949.**

Published by the Cement and Concrete Association, 52 Grosvenor Gardens, S.W.1. Price 2.6d.

Concrete Research No. 3 completes the first year of this publication, which is intended primarily for research workers. The present issue contains two technical papers, notes on current research, three articles on various apparatus and methods, and an annotated list of Papers, Books and Articles on Concrete published during the months of May to August, 1949.

Timbers of South America by R. P. Woods. Published by the Timber Development Association, 75 Cannon Street, E.C.4. Free.

This is the first booklet to be published covering commercial timbers from South America. With the introduction of the Hardwood Overseas Procurement Order No. III many timbers previously unknown have been imported into this country, and the abolition of hardwood control will now probably bring others. The booklet lists 93 different South American timbers and gives a general description with information on their working quality and uses. A useful booklet for those using or working with timber.

Savings in Timber and Money in Roofing. No. 2. Issued by Langley (London) Ltd., 72 Borough High Street, S.E.1. Free.

This booklet is devoted to an analysis of the savings in cost on house construction that can be effected by reducing the roof pitch of domestic buildings. The figures given for saving in timber and cost are convincing, and the improvement in appearance of small houses resulting from the flatter roof pitch is welcome. The booklet contains useful diagrams showing suggested roof construction, based on the revised Ministry of Works Timber Economy Memorandum—Timber No. 2. Additional data has been furnished by D.S.I.R. and the Forest Products Research Laboratory.

Constructions**Construction Research Bulletin No. 5. Glued Laminated Timber Structures by R. T. Walters.** Issued by the Timber Development Association, 75 Cannon Street, E.C.4. Free.

This Bulletin represents a survey of Glued Laminated Timber Structures, and deals with the advantages of lamination; design consideration; adhesives; cost, and species of timber commonly used. Examples and fabrication methods from Europe, America and Sweden are illustrated. It is interesting to note that glued Parabolic timber arches will be used in the construction of the Waterloo entrance to the Festival of Britain; these arches will span 101 ft. at the base and will be 62 ft. high. The photo-

graphs in the booklet show the dramatic possibilities of this form of construction and it is to be hoped that more examples will be seen in this country before long. The substance of this booklet was originally published in *Building Digest*, June, 1949.

Protection of Buildings and Materials

- **Tensulac Bitumen Paint.** Issued by Berry Wiggins & Co. Ltd., Field House, Breams Buildings, Fetter Lane, E.C.4. Free.

This booklet lists the advantages of bitumen for the protection of iron and steelwork against corrosion and it describes methods of application and general use. Details of laboratory tests are included together with specifications of the different grades of Tensulac for various conditions and requirements.

- **Portable Fire Extinguishing Appliances. Technical Booklet No. 6.** Published by the Fire Protection Association, 84 Queen Street, E.C.4. Free.

This booklet contains a detailed list of Portable Fire Extinguishing Appliances approved by the Fire Offices Committee together with the names and addresses of manufacturers. Notes are included on the suitability of different types of appliance for various kinds of fires, and on the installation, care and maintenance of Portable Appliances.

Lighting Equipment

- **Lighting Fittings. 1950 Catalogue.** Issued by Merchant Adventurers Ltd., 43 Portland Road, W.11. Free.

One of the stands at the last Building Exhibition which created considerable interest among architects was that of the Merchant Adventurers Ltd., which displayed their new range of lighting fittings. The company have now issued their 1950 Catalogue illustrating this new Utilume, Decolume and Fluorelume range of M.A. fittings. Most of them were designed by Paul Boissevain, the prices are reasonable and they are as attractive as their Swiss and Swedish counterparts. The Company is to be congratulated on this high standard of design and architects will show their appreciation of this new home-produced range of contemporary fittings, by using them widely, and so encouraging other manufacturers to improve their products.

Miscellaneous

- **Morris of Glasgow. No. 1.** Issued by H. Morris & Co. Ltd. 147 Milton Street, Glasgow, C.4. Free.

This is another publication illustrating British, well designed articles which can hold their own with the best European and Scandinavian examples. The Morris Company, established in 1902, have built a sound reputation for furniture of contemporary design and good workmanship. This publication is the first issue of the Company's broadsheet on its activities, not a catalogue. It is beautifully produced and includes photographs of the excellent Cumbrae furniture, the Cloud table and an interesting looking Finnish knock-down stacking chair, known as the "Stax," priced at £5 10s. each, and now being manufactured in the Morris Glasgow factory.

- **The Computation of Heat Requirements for Buildings. 1950 Edition.** Published by the Institution of Heating and Ventilating Engineers, 75 Eaton Place, S.W.1. Price 3/-.

This booklet was first published in 1942 and after seven impressions a revised edition has been prepared to include additional information not given in the original publication. The booklet is an extract from the Guide to Current Practice issued by the Institute of Heating and Ventilating Engineers to its members. All the information is presented in tabular form and the publication should be valuable to both the student and the practicing heating and ventilating engineer.

- **"Architectural Forum," March, 1950.** Published by Time Incorporated, 350 Fifth Avenue, New York 1, N.Y., U.S.A. Price \$2 monthly.

It is always a pleasure to turn the 250 odd glossy pages of *Architectural Forum*, and admire either the glamour girls advertising someone's flooring or the earnest looking professional gentleman giving solemn advice on heating or drainage. The architecture too, reminds the English reader

of less austere times; the Caribe Hilton Hotel at San Juan, Puerto Rico illustrated in the March issue, for example, cost 7 million dollars and caters for American millionaires, providing every luxury imaginable. The usual luxury single storey houses are always prominently featured, with their plate glass walls, Eames furniture and tropical planting. The Los Angeles House by J. R. Davidson has a living room with dining recess, kitchen, three bedrooms and the usual offices. (Cost, 26,000 dollars). Small houses and flats at reasonable rents for lower income groups, rarely appear in *Forum's* pages, and when they are illustrated the space standards and accommodation do not usually compare favourably with their average English counterpart. The 5,000 dollar "Builder's House" on pages 132 and 139, has only two small bedrooms, 683 ft. super of floor space, and the entrance from the outside is direct into the living room with neither hall nor draught lobby, which must be very inconvenient particularly in the winter months. The photographs show the houses under thick snow.

The important feature of the March *Forum*, apart from an excellent review of G. E. Kidder Smith's attractive forthcoming book *Switzerland Builds* is the special article on "Curtain Walls," by Robert L. Davison. This article analyses the problem of walling for multi-storey structures, it reveals the fact that the requirements of the New York Building Code (external walls to be of masonry of 8 in minimum thickness) resulted in an external facing to the Empire State Building with a "total weight of upwards of 30,000 tons, all of which is added to the loads which must be borne, structural steel columns and column footings." It is pointed out that most American building codes have in the past recognised in a sense, the fact that lighter curtain walls can adequately fulfil all the functions of the Building Code wall, by permitting ordinary windows to occupy up to 100 per cent. of the wall area. This fact has been used to advantage in the design of the United Nations building, with its 100 per cent. glass exterior.

New performance-type codes have now been accepted by most of the larger American cities, which define not the materials to be used on external walls, or their thickness, but specifies performance standards. An example of this is the new Chicago Building Code, approved in December, 1949, "which has no specified thickness requirement for curtain walls. The general fire-rating of two hours is dropped to one hour for the outside of exterior walls more than 30 ft. from another building area and three hours for inside exposure of exterior walls." This is obviously a considerable advance on previous legislation, and one that would receive wide support in this country where similar "Building Act" provisions prevent the use of thin curtain walls for multi-storey buildings.

Davidson's article examines in detail the case for the curtain wall; its saving in floor space and economy in structural framing; considers the performance standards in relation to wind pressure and fire resistance, and lists some of the alternative facing materials.

Eleven of the existing American curtain wall systems, all using metal for external facing, are illustrated, and the technical problems which arise with the use of their external membranes, such as condensation, moisture penetration and erection difficulties are discussed. To assist architects considering the use of thin external walls, an analysis of the cost of various materials available has been compiled by the Construction Survey Co., and these costs are compared with the costs for conventional walling. It is of considerable interest to note "that space saving has the greatest effect on economic costs." Two completed buildings are used as illustrations of the effective use of curtain walls, one Belluschi's Equitable Building in Portland, reviewed recently in the *A. & B.N.*, and the other the Alcoa Administrative Building in Davenport by Harrison and Abramovitz.

There is much of interest to English architects in this special issue of *Forum* and a revision of the London Building Act on the basis of performance standards similar to the recent U.S.A. Building Codes, in place of the present specified external wall thicknesses would be welcomed by architects in this country.

ARCHITECTURAL EDUCATION

"ARCHITECTURAL Education" was the title of another short course, the third, held by the Ministry of Education for the benefit of teachers of architecture at schools and colleges under the jurisdiction of the Ministry. However, some of the Universities had sent representatives and "observers" and two of the university schools supplied main speakers as will be seen below.

The Conference was held in the Henry Jarvis Hall of the R.I.B.A.

The organization of the programme and arrangements had been in the hands of Mr. Joseph Addison, whom most staffs of Schools of Architecture know well as one of H.M. Inspectors. He was assisted by his equally well-known colleague, Mr. W. M. Keesey and Mr. Cormack. There was a different guest chairman for every session and to say it in advance the conference made perhaps more positive contributions not necessarily applicable to the teacher only, but to architects in general. And there seemed to be less of that "groping" for the right approach and that often somewhat amateurish boast about the only true method of putting across the gospel of architecture, than at previous meetings. This was interesting as there were mostly the same people attending as in previous years. However, a new element seemed to pervade the spirit of the course, the quest for "Culture" and the "broadening of the student's mind." Sometimes one could not help feeling that the architectural profession must be suffering from an inferiority complex which subsequent speakers tried their best to dispel. Actually, there is, not only in architecture a deplorable tendency towards the "vocational training," of merely producing students capable of earning their living and knowing their particular job only. The universities often look down on the "Tech" student who is for all his London degrees often culturally an illiterate, but we hear even from places as elevated as Oxford and Cambridge that an unfortunate departmentalization of education is taking the place of the truly "Universal."

From that point of view alone it was refreshing to see that the keynote of the discussions was on "Design" with all the specialists put in their places. There was a lot of talk about the specialist and his position both in the curriculum and in practice. Specialization, so delegated to an inferior position of handmaid to the designer comprised in the opinion of a number of speakers not only the heating expert, the plumber and the interior decorator, but also the "building scientist" and of course the structural engineer. However, some speakers made up for it by suggesting more or less that the architect should have a working knowledge of all the "specialities." And it was perhaps on the basis of the "working

knowledge" and the ability to grasp the principles of all branches of sciences connected with architecture that some agreement was reached. Most Schools of Architecture seemed to suffer from a desperate shortage of teaching staff who are architects and yet capable of mastering the scientific basis to architectural design and furthermore to pass on that knowledge, leaving us still at the tender mercies of the specialist who is often not very sympathetic to architecture, and to whom his subject is his whole limited world.

This is rather surprising as the comprehensive understanding of the principles underlying the contemporary approach to architecture should be the tools of the trade of the architect who undertakes to train a new generation of the profession.

At the risk of sounding somewhat smug we feel that we are fulfilling all the requirements by passing on the knowledge which we have learned to regard as essential without trying to raise a generation of "specialists."

The methods suggested to broaden the mind of the architect and to make him a cultured member of Society were sometimes strange and ranged from courses in Roman lettering to controlling the reading of the students throughout the five years of the course. The professional Press came in for some criticism as often only giving publicity to work representing one school of thought, but nobody, strangely enough, took this point up by stressing that although that may sometimes be the case, it is reassuring to feel that at last we seem to be approaching something of a common philosophy after the muddle of the inter-war years.

Many smaller but not less important items resulted from the papers and subsequent discussions which are best dealt with in detail.

The proceedings were opened by Mr. KEESEY who thanked the R.I.B.A. for permitting the use of their premises and welcomed the visitors who included members from Scotland and from as far as New Zealand and Australia. He introduced the Chairman, KENNETH CROSS, Chairman of the Board of Architectural Education. Mr. Kenneth Cross introduced in turn the first speaker, PROFESSOR EDWARDS, Head of School of Architecture, Armstrong College, University of Newcastle-on-Tyne.

Professor Edwards started by pleading against too rigid planning of curricula and training at the risk of "swimming against the tide." He was probably somewhat pessimistic and too general when he enlarged on the way planning and controls pervade the whole set-up of Schools, from the Studio Master to the Head and the Principal of the College to the Director of Education (often unsympathetic to architecture) culminating in the

Ministry, the additional controls imposed by the R.I.B.A., by A.R.C.U.K., the Press, the Mars Group and others. He described as almost an ideal the happy-go-lucky school of twenty-five years ago at Manchester, which has produced out of its thirty students per year two City Architects, two professors, many prize winners and successful architects.

Here every student did just as he pleased, specialization was unknown. He suggested as an antidote to specialization the methods adopted in Newcastle where History, Theory and Construction is treated as an entity and every lecturer is expected to lecture at short notice in anyone of the three major subjects. His suggestion that this would also avoid sterility in a lecturer gives little credit to a lecturer's ability to enlarge and develop his subject.

His ideal school has forty students in the first year who are weeded out to thirty in the second, twenty-five in the third and keeps a steady twenty in the remaining two years. Two staffs to each year enable personal contact to be maintained, so vital to architecture and if this can not be achieved at existing schools more schools should be recognized.

He recommended that schemes should be small and occasional large ones only should be inserted as tonics. He stressed the importance of full size details and by that touched on a sore point with many schools. He enlarged on how many well-conceived buildings are suffering from indifferent detailing and he suggested three remedies. One, greater interest in measured drawings of old and new work; two, vacation work in offices where good detailing is practised; three, the vital point that teachers of architecture should be first and foremost architects, and here he pleaded that Local Authorities should not only grudgingly admit private practice "as long as it did not interfere with the teaching" but on the contrary encourage it as far from not interfering with teaching it is essential for keeping it alive. His speech did not seem to allow for the fact that many Local Authorities are already widely awake to the question of private practice. On the problem of the "practical" training of the architect, also discussed last year, he had little good to say. He said about actual works practice "in the little huts in the backyard": "We are not turning out bricklayers, but architects." In summing up he suggested that frequent discussions with the students are essential on anything bar politics and women. Specialists training to be left to the post-graduate stage, schemes to be small and standard of draughtsmanship high, avoiding fashionable techniques which so often miss the whole purpose of the drawing. The co-operation with other departments was here mentioned for

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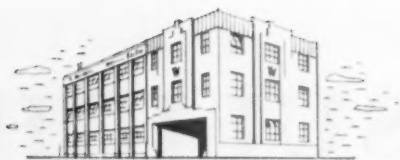
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the first time at this conference. The emphasis should be Design.

The paper was followed by discussion. One chief point was the question of private practice. Mr. GOODIN, Hammersmith, suggested that Universities seem to be better off in that respect. At one school according to the Professor we learned that private practice was prohibited within a radius of 50 miles! Mr. SHELLEY speaking for the Ministry of Education, stated that the Ministry encouraged private practice or any other form of research. However they could not be responsible for appointments made by Local Authorities. Mr. HAYNES, Secretary to the Board of Architectural Education of the R.I.B.A. stated that the Board was strongly in favour of private practice by staffs of recognized schools.

Then the discussion turned to the cultural background, so often lacking in the student and the school certificate was required as a bare minimum standard, but that many students were still too young. It was reported from Coventry that the utterly backward students kept on coming and were difficult to get rid of. Mr. CHIPPINDALE from Leicester suggested that it might help to show them the new rules for the external examinations, that might scare them off! On the various points raised regarding the lack of enthusiasm among students for measured drawings and also the little interest shown in the trade workshops attached to some colleges, Mr. Chippindale suggested that all these discussions seem to bear an air of unreality. The measured drawing of a building no longer has any bearing on the design students are interested in and the workshops still wasted a lot of time on out of date methods of carpentry. These remarks were received with enthusiastic applause by the majority and the meeting adjourned for sandwich lunch in the anteroom, where drawings from Newcastle were exhibited. After the plea for full sizes it was rather disappointing not to see any and the construction drawings which were shown looked very much "text book."

The afternoon session was presided over by Mr. SHELLEY O.B.E., Chief Inspector of the Ministry of Education. The speaker was Mr. CECIL C. HANDISYDE, whom most of us knew well from his work at the B.R.S. and his paper was on the "Study of Building Science, method and place in the curriculum." Mr. Handisyde made very constructive suggestions. Firstly he put building science in its place as a means to an end, but pleaded for an education which enables the architect to be familiar with all the scientific principles which govern the design at an early stage. These principles comprise, Structure, Heating, Lighting, Materials, day and sunlight. He considered it a horrible thought to call in the specialist at an early stage as that man will overemphasize his own subject at the expense of everything else.

On a method of teaching Mr.

Handisyde suggested that the principles of science in building should be taught at an early stage, say first year, the second year should be devoted to materials and structure while the third year might be suitable for specialized courses in materials, and the more specialized subjects. Generally speaking, the matter should be gone over twice in a course, first what can be done and second, why it can be done. Questions of lighting and acoustics for instance should not be handed over to the "expert" as they are so intimately connected with the design. However at a certain stage the consultant should be called upon and his fees not hidden by handing the job to a specialist contractor. The difficulty of a course in building science lies of course in the danger of its becoming disconnected from the remainder of the course and Mr. Handisyde suggested again what had been mentioned before in a different context, co-ordination of lectures, periodic lectures by the staff to other members of the staff, to keep each other informed about developments and methods. And once again he pleaded the lecturers should be *architects* not scientists, but that they should be able to teach. He suggested the fact known to many who have tried it that laboratory work is difficult in great numbers and advocates good slides as often a better alternative. There should be visits, followed by reports, but the most important feature remained the training towards an attitude of mind, a scientific way of thinking!

In the discussion which followed Mr. PAINE, of Canterbury, endorsed the fact that specialists were dreadful people who talked too much, but few staffs were able to teach the "scientific aspect."

It was suggested that the specialist was after all required in the first place to teach the "principles."

Mr. ADDISON enlarged on the principle that Building Science should be taught by architects. Architecture is an "art conscious of science" and only the architect with his mainly visual imagination will be able to give the necessary visual demonstration of principles needed for the architectural student. Mr. GOODIN, Hammersmith, doubted the possibility of the scientifically trained architect. After some further contributions often straying widely from the subject Mr. HANDISYDE summed up in his reply that each member of the staff at a school could develop a special pet subject in addition to his ordinary qualifications. This seemed excellent advice tried successfully at some places and of course in flat contradiction to this morning's speaker who wanted the staff to change subjects at short notice.

Mr. SHELLEY summed up by saying that as an engineer he for one would hate it if anybody other than an engineer were trying to deal with engineering!

After a tea interval again under the same chairmanship Miss BRENDA COLVIN, A.I.L.A., gave a paper on

the study of Landscape Architecture, its method and place in the curriculum. She opened the talk by reversing what had been implied in Mr. Handisyde's address, namely that the architect could do everything. In Miss Colvin's opinion town planning is more compatible with architecture than landscape architecture except perhaps where the garden becomes an unroofed extension to the house and where the plants are treated as interior design. However the knowledge of plants is too extensive and many problems of the landscape architect are too remote from architecture in any form, e.g., the reconstruction of the land at the conclusion of open cast mining or quarrying. The principles of planting and grouping are easily appreciated by students of architecture and Miss Colvin pleaded for the adoption of methods of draughtsmanship which would clearly indicate the colour and texture and contours, etc., intended by the designer. The difficulty of course was that plants were constantly changing and what might constitute a perfect sight-line in winter may be entirely overgrown in the summer. Proportion and form differ from architectural proportion and contours and levels are often not appreciated. A frequent occurrence was the design of pools which would require sloping water "levels." The following might be a good order in which to develop a course:

The study of contours, the study of trees, their summer and winter conditions, voids and solids in landscape, landscape texture, proportion and rhythmical punctuation, history can be linked with architectural history. Practice in careful surveys and frequent site visits. There is scope for the landscape architect in new towns planning, but the work becomes highly specialized involving negotiations with the Forestry Commission, the Land Board and other special organizations.

As far as landscape architecture is concerned Miss Colvin does not think that the study of plant biology is essential and often knowing what results are wanted is enough to hand the job over to the horticulturist who will provide the plants to do the job.

The discussion was centered round the problem found so troublesome in other subjects, namely how to teach the subject.

Mr. SUMMERS, Nottingham, for instance, suggested that in Stockholm the designers just give shapes, colour, etc., the horticulturist did the rest. Miss Colvin agreed that this might work on a smallish scale, but whatever the method was, it was better than what happens in most British county council offices, where usually one department produces the pattern, another the plants, and the two never meet. Mrs. HEYWOOD, Leicester, reported her good experience with the parks department who co-operate by exhibited new and different plants well labelled every fortnight at the School.

The value of models was stressed and when it was asked whether a

student should branch off into that subject, Miss Colvin suggested that it was difficult to foresee whether the present demand will develop. At any rate the student should change early in his career to specializing in landscape architecture.

The co-operation with sculptors was referred to and how successful Battersea had been, although it was doubtful whether the sculptors found it so. Miss Colvin was somewhat embarrassed when, in reply to a question Mrs. Heywood thought that the best book on the subject, particularly on topography, was Brenda Colvin's. Again Mr. CHIPPINDALE brought the meeting down to earth by enlarging on the bleakness of the outlook: No great numbers will be wanted, nobody there to teach it, we were just lucky in Leicester with London only two hours away, and finally nobody there to carry out any scheme once it is designed.

In reply to a further question Italy and Switzerland were given as the best places to study contemporary landscaping.

The meeting concluded the day's activities and only a few felt sufficiently strong still to look at more drawings exhibited upstairs in the Aston Webb room. Of the schools present only one, Leicester had shown post-graduate work in landscape design in the form of testimonies of study for the I.L.A.

SECOND DAY

After having been unable to get into any show in town the members re-assembled Friday morning, suitably refreshed. This session was designed to steer the course gradually over to the other side of the fence.

Under the chairmanship of Mr. SIDNEY TATCHELL, C.B.E., Chairman of the Architect's Registration Council, the session opened with a paper by Mr. E. C. HARRIS F.R.I.C.S., on "A Quantity Surveyor's view on technical knowledge expected of a young architect."

The paper turned out to be excellent advice not necessarily only to the young architect. Judging by what Mr. Harris had to say it seems about high time that that practice should be discontinued whereby the Q.S. designs the building based on some very vague instructions from the architect. He asked for complete sets of drawings and plenty of annotated sketches. As an example of what he has had to put up with he quoted the case of the 1/500 scale drawings of a large building on an undulating site from which he was expected to take off quantities! He confirmed the soundness of the method, by which 1/4 scale drawings are not prepared until all large scale details are ready. He pleaded for legible prints with the view to the eyesight of the poor Q.S. and his staff and advised the architect to consult him at all stages in the preparation of the design as he will always find him

willing to co-operate on all matters concerning the economy and appropriateness of materials and suitable sub-contractors and specialists. He expects the architect to have a sufficient knowledge of soil mechanics, to give him all details relevant to foundations at an early stage. The architect should be well versed with steel and reinforced concrete construction to be able to set out the structure and to know where beams are likely to occur and to know sufficient about the services to incorporate all work connected with these at an early stage, to avoid later cutting and chasing. Some knowledge of approximate costs should be necessary to be able to assess the appropriateness of estimates, for instance that it costs about 2s. 6d. per square foot to heat a building. On the other hand he did not want any specifications as these often voluminous documents are actually redundant, but comprehensive schedules. He concluded by saying that the British system of taking off quantities and obtaining competitive tenders was the best in the world.

The chairman added that sufficient time should be given to the architect to prepare all the details and that he should get really precise instructions from his client and the client's wife. Similarly the Q.S. should be given enough time also. As to specifications, these did not form part of the R.I.B.A. contract, anyway.

The discussion veered round the pros and cons of schedules versus specifications until Mr. STEWART, of Manchester, brought it nearer home again by asking how the students should acquire the comprehensive knowledge expected of them and a lot was said again about specialists and liaison with other courses, builders' and the rest.

Then Mr. CHIPPINDALE, Leicester, stood up, and this time his controversial mind led him on rather dangerous ground.

Taking up Mr. Harris's contention that the British system of quantities was the best in the world, he said that we took it rather seriously at Leicester by providing a regular lecture course dealing with the introduction to quantity surveying for the architectural students as part of the curriculum, but that we experienced great difficulty in convincing the students of the importance of the Q.S., particularly in view of American practice, only recently observed again, where they build so much quicker and better and often less costly without the intermediation of the quantity surveyor. He was not suggesting that there were any vested interests in the profession, but if the quantity surveyor may not sometimes lead to a kind of bottleneck.

As to the question of liaison, we hear so much about it that there will soon be no time to teach architecture!

Mr. HARRIS replied immediately by stating that having just returned from New York, he could provide first-

hand information on the subject, having discussed it with an American quantity surveyor. The fact is, that America is just about a hundred years behind us in that respect! Admittedly, the Q.S. there has not the same professional status and quantities did not form part of the contract; in fact, contractors took their own quantities. It put a much greater onus on the architect, who has to detail much more comprehensively and whose dimensioning must be painfully accurate. There are no bills of variations and all variations are settled by haggling.

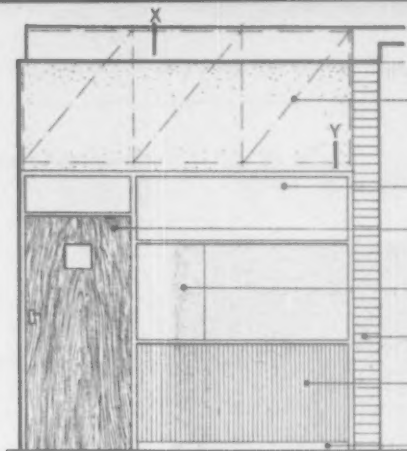
Well, judging by results and the fact that our "best" method is not used in some continental countries where the standard of building and design is extremely high, it makes you wonder.

After morning coffee we were taken right over to the other side. The speaker was Mr. D. E. WOODBINE-PARISH, F.I.O.B., Vice-President of the London Master Builders' Federation. The subject was: "A builder's view on the technical knowledge expected of the young architect."

To see Mr. Woodbine-Parish should be an inspiration to all those who believe in a healthy building industry, in more than one respect, and it was difficult to imagine anybody looking kinder and less like a member of a rapacious trade, but the sensitiveness radiating from his countenance also makes him rather unlike the honest but somewhat coarse Grigby. He prefaced his address with the remark that some of what he was going to say would be at variance with the opinion of many of his builder colleagues.

In his opening remarks he said that he rather agreed with all that Mr. Harris had to say on the technical requirements as they were exactly the same as those of the quantity surveyor, and Mr. Harris had really taken a lot of wind out of his sails. But this is how he continued: Architecture is one of the highest callings. The architect should receive the highest liberal education with a background of arts, music and social history. "A narrow mind will never produce a fine building." "Education in the past has merely produced technicians." The audience was visibly growing halos when Mr. Parish continued: "The architect should have the grace and the skill of the artist, the cool, logical mind of the scientist, the mental agility of the financier, the tact of the high-ranking ambassador, express himself like a barrister, have the charm of Adonis and the patience of Job."

"The architect derives enjoyment from his doings, gets satisfaction but not necessarily bounty!" After all this it was strange that the young architect was not daunted, he suggested, and he followed on by saying that the architect should hold a key position, not dominated by finance and specialist. He should command the highest standard of moral integrity. If



ELEVATION

SCALE $\frac{1}{4}" \times 1'0"$

4"x2" LINTOL, 2"x2" TOP, SIDE AND INTERMEDIATE BRACING. PLASTER ON EXPANDED METAL

FIXED GLAZING

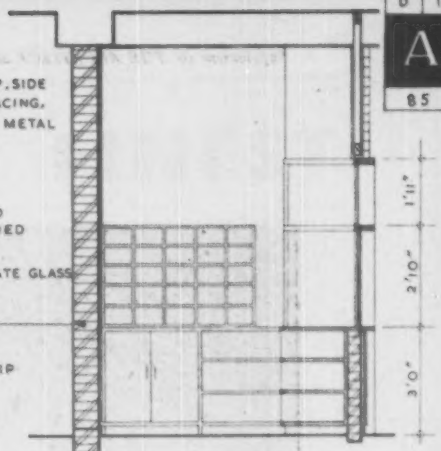
FLUSH DOOR HARDWOOD VENEERED WAX-POLISHED

SLIDING PANEL OF PLATE GLASS

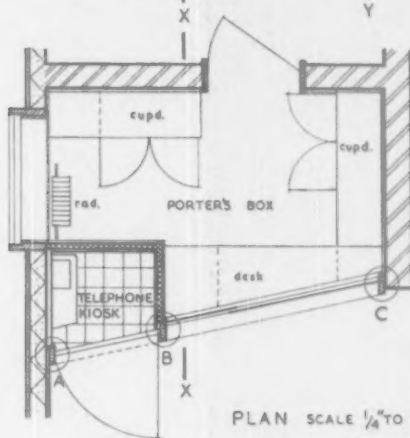
9" BRICKWORK

2"x1" HARDWOOD STRIP WAX-POLISHED

ALUMINIUM SKIRTING



SECTION X-X



PLAN SCALE $\frac{1}{4}" \text{ TO } 1'0"$

$\frac{1}{4}"$ PLATE GLASS

2" HOLLOW BUILDING BLOCKS

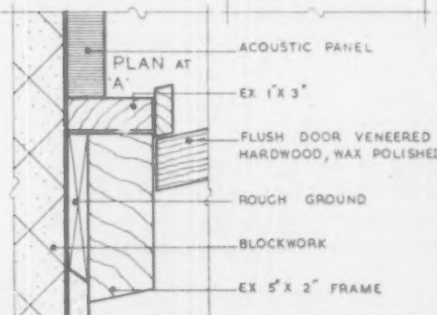
$\frac{3}{8}"$ FIBRE BOARD

EX $\frac{1}{2}" \times 1\frac{1}{2}"$

$1\frac{3}{8}"$ FLUSH DOOR HARDWOOD VENEERED, WAX POLISHED

EX $5" \times 2"$

PLAN AT 'B'



PLAN AT 'A'

ACOUSTIC PANEL

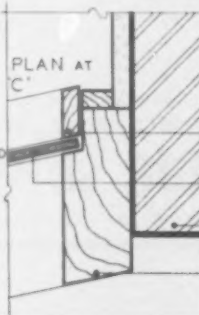
EX $1' \times 3'$

FLUSH DOOR VENEERED HARDWOOD, WAX POLISHED

ROUGH GROUND

BLOCKWORK

EX $5" \times 2"$ FRAME



PLAN AT 'C'

EX $2' \times 1\frac{1}{2}"$

$\frac{1}{4}"$ POLISHED PLATE GLASS

9" BRICKWORK OF SELECTED FACINGS

EX $5" \times 2"$ FRAME

$\frac{1}{2}"$ PLASTER

4"x2" FRAMING

9" BRICKWORK

EX $5" \times 2"$

EX $1' \times 2\frac{1}{2}"$ COVER STRIP

$\frac{1}{4}"$ PLATE GLASS IN CHAMOIS LEATHER

EX $5" \times 1\frac{1}{2}"$ TRANSOME

EX $1' \times 1\frac{1}{2}"$ COVER FILLET

$\frac{1}{4}"$ PLATE GLASS SLIDING IN FELT LINED ALUMINIUM CHANNEL

PLASTIC FACE COUNTER FINISH

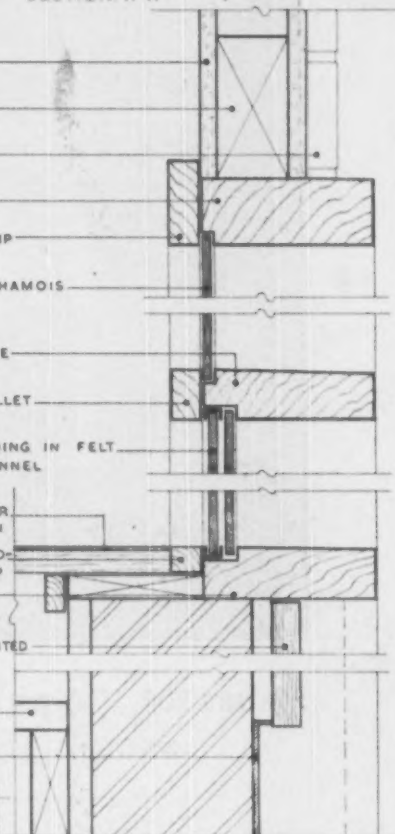
$1' \times \frac{3}{4}"$ REMOVABLE HARDWOOD STRIP

EX $5" \times 1\frac{1}{2}"$

EX $2' \times 1"$ HALVED VJOINTED HARDWOOD STRIPS

BOTTOM OF DESK

$\frac{1}{8}"$ ALUMINIUM SKIRTING



SECTION Y-Y SCALE $\frac{1}{4}$ FULL SIZE

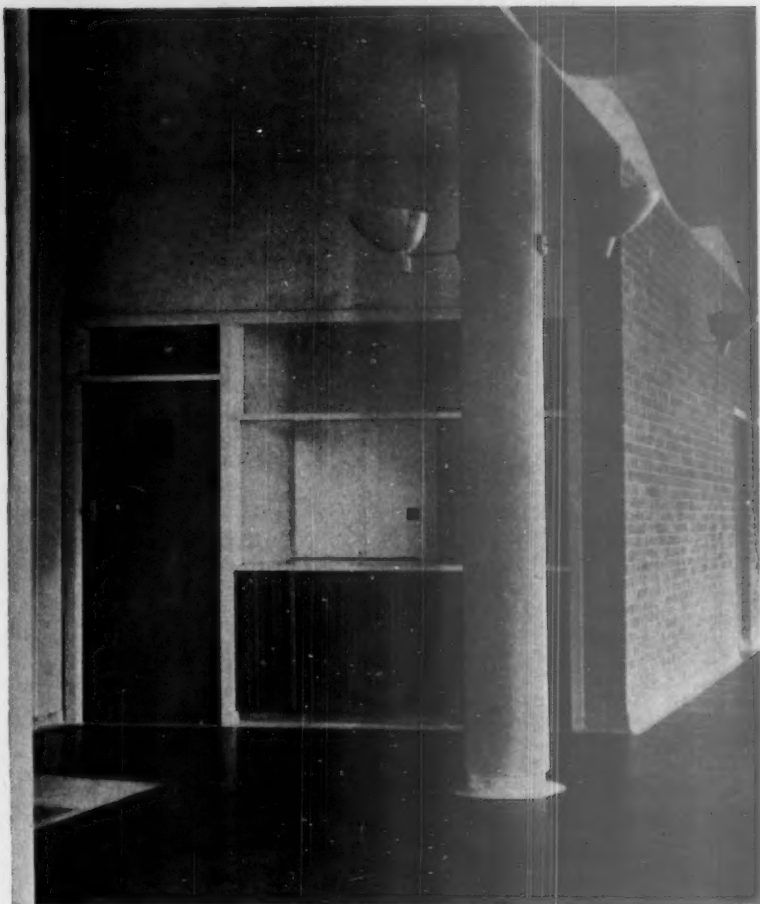


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he may offer some criticism, it was that the architectural profession lagged somewhat behind in the administration side. The architect should be driving in the middle of the road and do the driving, not let the builder do it. And it should not be forgotten to impress on the young architect that there is a lot of dull work to be done; the small repair jobs which occupy 300-400,000 of all the operatives employed in the industry are often not given enough thought; surveys, for instance, are often inadequate. As to training, he thought that the atmosphere at a school is possibly too "rarified" often, and the students should see more work in progress and, a vital point, see and speak to the foreman! He saw no need to teach the architect the taking off of quantities, but he should be familiar with the standard method of measurement and with the R.I.B.A. form of contract which is so fundamental to the builder. On the question of time allowed, he pleaded for sufficient time for tendering and regretted that rarely an acknowledgement, let alone thanks, is given to the contractor who has spent a lot of care and money on tenders.

"Although we are usually shown with the price tag round our necks, there are far more builders in the trade for what they can put into it than for what they get out of it." And, he almost begged, give due respect to your best friend, that fount of wisdom and good advice, the general foreman!

He then enlarged on payment by result. "The 19th century has witnessed the emancipation of the middle classes, the twentieth that of the working classes; we have to acknowledge this fact..." and continued, "I do not hire labour, I sell employment!" Other industries had long since woken up to the fact of payment by results. Working schemes are in preparation to apply this inevitable system to the building industry, but great obstacles are still to be overcome on both sides of the industry."

There was enthusiastic applause when Mr. Woodbine-Parish finished, and the Chairman acknowledged that the problem had certainly been lifted on to a very high plane.

In the subsequent discussion Mr. DARCY BRADDELL remarked that he had never heard more common sense, only felt he ought to add to the requirement of integrity that of artistic integrity. The artist must do as he knows best. And the foreman is indeed a marvel! After enlargement on the question of artistic integrity from several sides, Mr. Chippingdale, coming down to brass tacks, again suggested that the training of the builder was by no means what it ought to be and what was done to get the right type into the industry and furthermore not only into the so-called "clean" branches of it.

In his reply we learned one reason

for Mr. Parish's admiration for the architect: He is married to one! Once more he stressed that builders are often very sensitive and it had not always been the speculative builder who was spoiling our island, referring to the many lovely London squares which had been built speculatively. As to the "right type," the trouble was over-employment at the moment, and it was leading many boys to choose "Music while you work." He suggested that the industry should not close its ranks to the older and more mature applicant up to, say, 25 years of age. He largely blames the schools for the tendency of boys to go in for the so-called clean jobs, but building was not only making pipe racks for daddy! And once more, in conclusion, he pleaded for the general foreman.

During lunch-time those members who had not found the time earlier, made a hasty attempt at studying the remainder of the drawings exhibited in the Aston Webb room, mainly devoted to interior design, from Regent Street Poly, Northern Poly, Bartlett, Leicester and Oxford.

The afternoon session was under the chairmanship of Howard Robertson, who "had been looking forward to this particular session as it deals with structure, the very bones of architecture and the smiles and dimples of decoration!"

Mr. WARREN-WILSON, Senior Lecturer in Interior Design and Colour at London University, gave first a few general thoughts on the organization of a course which is to be planned as an entity and to ascend through different stages of difficulty. Free and formal draughtsmanship is to be developed and for the formal side it may be difficult to find a substitute for the orders. Everything should be sketched: life, trees, costumes and the breakfast cup. The course should be broad and cultural rather than vocational. Marking should be occasionally done by juries of students. The instructor's duty was to encourage. There is little known of the mechanics of vision, at the source it was all part of the same radiation, it was at the receiving end that it varied. If there was an alphabet of colour it should certainly not be withheld from the student. We seem to see best by looking at objects obliquely. He recommended the use of models and then showed some slides of exercises, comprising sketches for fireworks displays, neon signs, one or two patterns and a stage set.

Mr. TOPLIS, Regent Street, asked whether there was not a difference in approach between the painter and the architect, colour being the focus of interest to the painter while to the architect it was merely a background to form. And whether the exaggeration on most drawings and models was necessary due to the different scale compared with reality. The reply was that form was indeed of interest

to the painter as well. Mr. KUTNER, Swansea, asked how far the speaker thought one could go with the training of the architect in interior design. Reply: The architectural student can be made artistically perceptive. Mr. HOWARD ROBERTSON asked what future there was for the interior designer. Reply: He can tackle many jobs, he can design furniture, he can design processions, he can design textiles. Howard Robertson: Rather like an industrial designer. Upon a question whether the interior designer was taught construction, the answer was yes. Here the discussion flagged. But like a blast of fresh air from over the sea, a visitor from Australia, Mr. GAMBLE, full of temperament, suggested that he was extremely sorry about all this distinction between decoration and architecture, and to make it two different operations seemed utterly absurd and the architect should not always be needing the specialist!

This was to everybody's liking and no more was said. There were a few minutes left, and Howard Robertson from the chair reminded us that there were still five minutes to win the half-crown. But, apart from Mr. Toplis trying once more to get his point about scale in colour cleared up, there was nothing more to follow.


The final session, under the same Chairman, was opened by Sir MARTIN ROSEVEARE, Senior Chief Inspector, Ministry of Education, who added his thanks to the R.I.B.A. and to the members of the course for their co-operation, and then the meeting proceeded to the "bones" with Mr. BRIAN H. COLQUHOUN, designer of the Mersey Tunnel and the Brabazon Assembly Hall, on the subject of "A structural engineer's view on the architectural possibilities of engineering methods and materials."

The lecture consisted mainly of numerous slides illustrating good and bad uses of structure. For instance, Waterloo Bridge came in for severe criticism as it suggested a system of arches when it was actually a continuous beam. One of the French bridges was (not unnaturally) the one of the best design. In the example of the Mersey Tunnel the architect's part was confined to that of the mere decorator who clothed the "bones" and also the machinery buildings.

Five o'clock was reached before there had been time for discussion, and after a hurried summary by Mr. KEESEY the members of the conference quickly dispersed to catch various trains.

The teaching staffs of many schools had got to know each other a little better, but they constitute a mixed batch, with mixed problems which at a conference such as this could only be touched upon. Perhaps two days are too short or subjects dealt with still somewhat too general.

H. W. ROSENTHAL

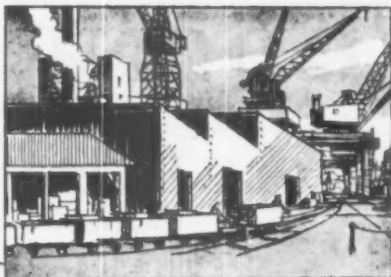


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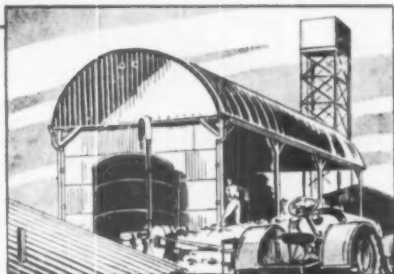
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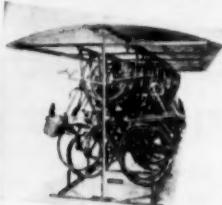
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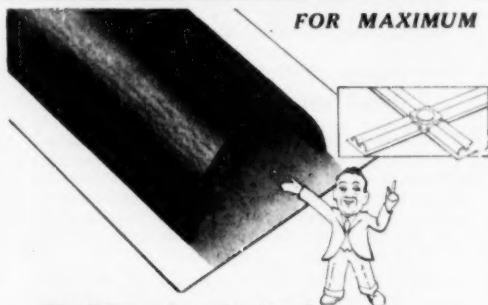
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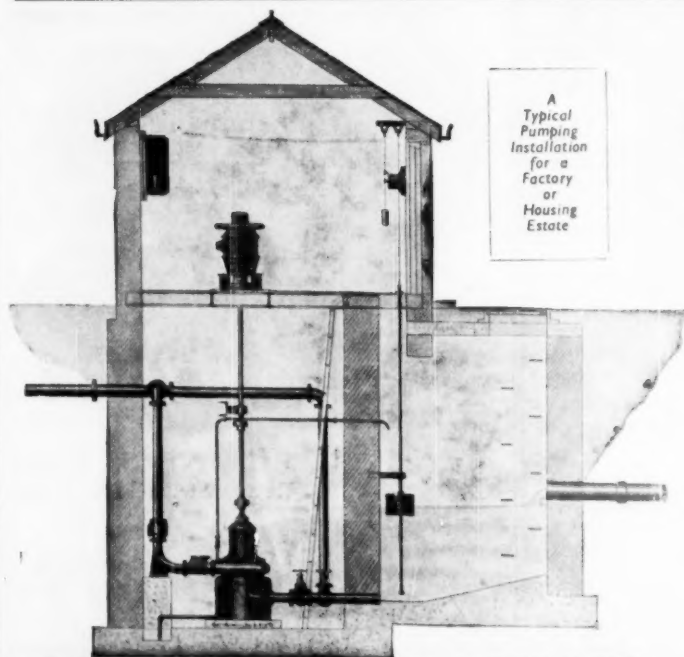
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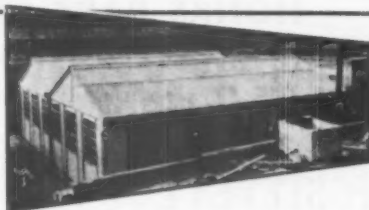
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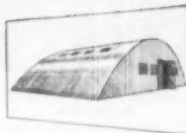
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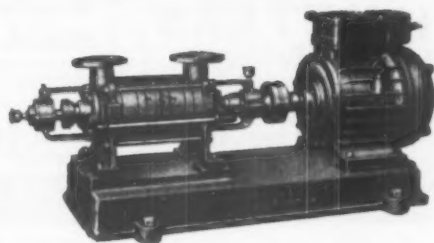


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Salary: Architectural Assistants, £300-£525 per annum, plus overtime. Starting pay will be assessed according to age, qualifications and experience. These rates are for London; a small deduction is made in the Provinces.

Although these are not established posts, some of them have long term possibilities and competitors are held periodically to fill established vacancies.

Apply in writing, stating age, nationality, full details of experience and locality preferred, to Chief Architect, W.G. 10, A.T. Ministry of Works, Abell House, London, S.W.1. 14483

BRACKNELL DEVELOPMENT CORPORATION (Bracknell, Berks) invites applications from suitably qualified persons for the following appointments—

(1) (a) SENIOR PLANNER.

(b) SENIOR ARCHITECT (Housing).

(c) SENIOR ARCHITECT (Other Buildings).

Salary £900 x £50 - £1,000.

(2) (a) PLANNER.

(b) ARCHITECT (Housing).

(c) ARCHITECT (Other Buildings).

Salary £750 x £50 - £900.

(3) (a) PLANNER.

(b) ARCHITECT (Housing).

(c) ARCHITECT (Other Buildings).

Salary £550 x £40 - £750.

(4) FIVE JUNIOR ASSISTANTS.

Salary £420 x £20 - £520.

Applicants for 1(a), 2(a) and 3(a) should be Corporate Members of the T.P.I., and also have an appropriate architectural qualification. They should also have a sound knowledge of town planning with particular reference to the problems of New Town development.

Applicants for 1(b), 1(c), 2(b), 2(c), 3(b), 3(c), should be Corporate Members of the R.I.B.A. and an additional town planning qualification will be an advantage. Architects (Housing) should have had experience of the design and construction of large housing layouts and Architects (Other Buildings) of all types of industrial and public buildings to New Town development.

Applicants for (4) should have passed at least the examination of the appropriate professional body.

Successful applicants will work under the direction of E. A. Ferriby, B.Arch., A.R.I.B.A., A.M.T.P.I., Chief Architect to the Corporation.

The posts will be superannuable under the Local Government Superannuation Act, 1937, and successful candidates will be required to pass a medical examination.

Applications, giving full particulars of the candidate's age, qualifications and experience, together with the names of two persons to whom reference can be made, must reach the General Manager, Bracknell Development Corporation, 11 Grosvenor Square, London, W.1, on or before 3rd June, 1950. 14474

THE TRUSSED CONCRETE STEEL CO. LTD.

REINFORCED CONCRETE ENGINEERS AND CONTRACTORS.

INVITE applications for the following positions on their permanent staff—

(a) ENGINEERS FOR THE DESIGN OFFICE.

(b) DETAILERS AND DRAFTSMEN FOR THE DESIGN OFFICE.

(c) ENGINEERS FOR THE CONSTRUCTION DEPARTMENT.

Wide experience—all types of reinforced concrete work.

All positions are progressive and pensionable, and vacancies occur in London, Birmingham, Manchester and Glasgow. Five-day week. Salary according to experience and ability. Details of training, experience, and salary expected should be sent to Truscon House, 35/41 Lower Marsh, London, S.E.1 (adjacent to Waterloo Station). All replies will be treated as confidential. 10094

COUNTY BOROUGH OF GRIMSBY.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF SURVEYING ASSISTANT.

APPLICATIONS are invited for the appointment of a SURVEYING ASSISTANT in the Planning Section of the above Department at a salary in accordance with Miscellaneous Grade J1 (£315 x £15 - £460 per annum).

Candidates should be neat and expeditious draftsmen, preferably with experience in preparing planning maps, used to field survey work and general office routine.

The appointment is on the permanent staff and subject to the Conditions of Service of the National Joint Council, terminable by one month's notice on either side and to the provisions of the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination.

Form of application may be obtained from the undersigned and should be completed and returned, together with copies of two recent testimonials, so as to reach this office not later than Monday, the 29th May, 1950.

J. V. OLDFIELD.

Borough Engineer and Planning Officer.

Municipal Offices.

Town Hall Square, Grimsby.

April, 1950. 14486

CROWN AGENTS FOR THE COLONIES.

STAFF required by the Tanganyika Government for the Public Works Department, for one tour of two to three years in the first instance. The appointments will be on probation for permanent and pensionable employment. Outfit allowance up to £45. Free passages and liberal leave on full salary.

(a) **QUANTITY SURVEYOR.** Commencing salary according to age and experience in scale £305 a year rising to £1,140 a year. Candidates, preferably under 35, must be Chartered Quantity Surveyors with considerable experience of the preparation of contract documents and the administration of public works contracts.

(b) **ASSISTANT QUANTITY SURVEYOR.** Commencing salary according to age and experience in scale £390 a year rising to £840 a year. Candidates, preferably under 30 years of age, must have passed the Intermediate examination of the Royal Institution of Chartered Surveyors, have completed the normal training whilst articled to a Quantity Surveyor and have the intention of becoming professional Associates. They should be experienced in building works, with a sound knowledge of building construction and specifications. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4 Millbank, London, S.W.1. Candidates for (a) should quote the reference M.N.25566/3A, and for (b) should quote M.N.25567/3A on both letter and envelope. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration. [4481]

CITY OF WESTMINSTER.

WESTMINSTER CITY COUNCIL.

HOUSING DEPARTMENT.

ASSISTANT CLERK OF WORKS for Public Housing Scheme. Temporary appointment. Salary not exceeding £9 8s. 0d. per week inclusive. Age limit 45 years. Canvassing will disqualify.

Applicants are required to have had a wide practical experience in large scale building operations. The person appointed will supervise the general constructional building work and internal finishing on multi-storey blocks of flats, and will work under the supervision of Resident Engineer and Clerk of Works on the site.

Applications, marked "Housing Department - Assistant Clerk of Works," stating full name, address, age, experience and qualifications, whether related to any member or Chief Officer of the Council, with copies of two recent testimonials, must be received by 9 a.m. on Wednesday, 17th May, 1950.

PARKER MORRIS, Town Clerk.

Westminster City Hall,

Charing Cross Road, W.C.2.

28th April, 1950.

[4494]

BOROUGH OF BRENTFORD AND CHISWICK.

APPOINTMENTS OF (a) JUNIOR BUILDING INSPECTOR, AND (b) TEMPORARY JUNIOR ARCHITECTURAL DRAUGHTSMAN.

BOROUGH SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the appointment of (a) **JUNIOR BUILDING INSPECTOR** and **TOWN PLANNING ASSISTANT** on the permanent staff at a consolidated salary according to Miscellaneous Division, Grade I of the National Scheme of Conditions of Service (£315-£360 per annum, plus appropriate London Weighting) commencing first year, the appointment being determinable by one month's notice on either side. Applicants must possess a good knowledge of building construction and preferably have had experience in a Building Inspector's Office, and also possess a general knowledge of Town Planning; and

(b) **TEMPORARY JUNIOR ARCHITECTURAL DRAUGHTSMAN** at a consolidated salary according to the Miscellaneous Division, Grade I of the National Scheme of Conditions of Service (£315-£360 per annum, plus appropriate London Weighting) commencing first year, the appointment being determinable by one month's notice on either side. Applicants should be experienced in the tracing and colouring of architectural and engineering drawings, and a working knowledge of building construction and municipal engineering being an advantage.

Applications for the above-mentioned appointments must be made on the prescribed forms (which contain particulars and conditions of appointment) obtainable from the undersigned, to whom applications should be sent not later than the 25th May 1950.

W. F. J. CHURCH, Town Clerk.

Town Hall, Chiswick.

[4488]

DERBYSHIRE COUNTY COUNCIL.

COUNTY PLANNING DEPARTMENT.

APPLICATIONS are invited for the following appointments—

(a) **SENIOR PLANNING ASSISTANT (DEVELOPMENT CONTROL)** in the Peak Area Planning Office, Bakewell, A.P.T. Grade VI (£595-£660).

Applicants should be Associate Members of the Town Planning Institute and/or Associate Members of the Royal Institute of British Architects. Experience in the Planning Department of a Local Authority will be an advantage. A motor car allowance in accordance with the County Council's scale is attached to this post.

(b) **DRAUGHTSMAN** in the (1) Headquarters Office, Derby; (2) Area Planning Office at Chesterfield, Misc. Div. Grade I (£315-£360).

Applicants should be competent Architectural Draughtsmen, preferably with experience in the office of a private architect or the Architectural Department of a Local Authority.

(c) **MODEL MAKER** in the Headquarters Office.

A.P.T. Grade IV (£480-£525).

Applicants should have a comprehensive experience in the making of architectural and relief models. Additionally experience in general presentation of plans and drawings would be an advantage.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1917, the Council's Conditions of Service, and medical examination. Applications from registered disabled persons would be considered. The appointments may be filled at a commencing salary within the range of the Grade indicated according to qualification and experience.

Canvassing either directly or indirectly will be a disqualification, and candidates should state whether they are, to their knowledge, related to any member of the Council or to any senior official.

Applications, stating age, qualifications and experience, accompanied by one recent testimonial and the names of two persons to whom reference can be made, should reach the undersigned at 8A Bold Lane, Derby, not later than May 13th, 1950.

MAURICE J. HELLIER,

County Planning Officer. [4458]

ESSEX EDUCATION COMMITTEE.

SOUTH-EAST ESSEX TECHNICAL COLLEGE AND SCHOOL OF ART.

LONGBRIDGE ROAD, DAGENHAM.

REQUIRED as soon as possible: (a) **SENIOR ASSISTANT IN SURVEYING** in Arts Department, which is recognised by Royal Institution of Chartered Surveyors, for full-time and part-time courses leading to the Intermediate Examinations of that body in Valuations, Estate Management, Quantities and Building Surveying.

(b) **ASSISTANT IN SURVEYING** in same Department. Salaries according to Burroughs Further Education Report, 1948 (a) £700 x £25 + £800; (b) £400 x £15 + £555 for man with London and appropriate training and graduation allowances. Application forms and further particulars from the Clerk to the Governors at the College, to whom the completed forms should be returned within 14 days.

D. N. BUNGEY,

Acting Chief Education Officer. [4491]

MINISTRY OF WORKS.

VACANCIES exist for **SENIOR AND LEADING ARCHITECTURAL ASSISTANTS** in London, at Risley (Warrington) and at Capenhurst (Cheshire), for drawing office duties in connection with important Research Establishments.

Candidates should be of British nationality and have had a recognised architectural training and good experience.

There are also vacancies for first class Draughtsmen in the Senior Architectural Assistant Grade.

Salary: Senior Architectural Assistants—London, £625-750 per annum; Risley and Capenhurst, £595-720 per annum.

Salary: Leading Architectural Assistants—London, £560-625 per annum; Risley and Capenhurst, £470-595 per annum.

Hostel accommodation, for men, at reasonable cost, is available at Risley, and there is a possibility of housing being available in the near future at Capenhurst.

Apply in writing, stating locality desired, age, training and experience, to Chief Architect, W.G. 10/A.N. Ministry of Works, Abell House, John Islip Street, London, S.W.1. [10996]

METROPOLITAN BOROUGH OF PADDINGTON.

HOUSING DEPARTMENT.

APPOINTMENT OF ASSISTANT ARCHITECT.

(1).

APPLICATIONS are invited for the above-mentioned appointment on the permanent establishment of the Housing Department, Architectural Section (which also deals with all Council's building work). Particular stress is laid on the desirability of candidates having been engaged on and having an interest in the best contemporary architecture.

Salary A.P.T. VI/VII (£595-£710 per annum), plus London "weighting" according to age.

Applicants must be Registered Architects, preferably Associates of the Royal Institute of British Architects and have had experience in architectural design and construction of general municipal work, including multi-storey flats, or similar experience with private firms of architects.

The appointment will be subject to one month's notice on either side, to the provisions of the Council's Superannuation Acts and Standing Orders and to the National Joint Council's Scheme of Conditions of Service.

The commencing salary will be at an appropriate point within the grades dependent upon the qualifications and experience of the successful candidate.

Forms of application and conditions of appointment can be obtained from me on receipt of a stamped, addressed foolscap envelope. Applications should be delivered to me, in an envelope endorsed "Assistant Architect," not later than noon on Tuesday, 10th May, 1950.

Candidates must state, in writing, whether, to their knowledge, they are related to any member or senior officer of the Council.

Canvassing, directly or indirectly, will disqualify. **W. H. BENTLEY,** Town Clerk.

Town Hall, Paddington, W.2.

4th May, 1950.

[4487]

BOROUGH OF CHIPPENHAM.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

APPLICATIONS are invited for the appointment of **ARCHITECTURAL ASSISTANT** in the Borough Surveyor and Water Engineer's Department at a salary in accordance with the National Conditions of Service for Local Government Officers, that is, Grade IV for Architect with Intermediate Examination R.I.B.A. and Grade V for Registered Architect. The appointment will be subject to the National Scheme of Conditions of Service, the provisions of the Local Government Superannuation Act, 1917, and the successful candidate passing a medical examination.

Candidates must have had previous experience in connection with Municipal Housing Works and other Public Buildings, and should possess qualifications laid down by the National Conditions of Service for Local Government Officers.

Applications, in envelopes endorsed "Architectural Assistant," stating age, qualifications, experience, and accompanied by the names of three persons to whom reference can be made, must be received by the undersigned not later than Saturday, 27th May, 1950.

A. STRAND, Town Clerk.

The Old Palace

10 Market Place, Chippenham, Wilts.

25th April, 1950.

[4491]

LONDON COUNTY COUNCIL.

APPLICATIONS are invited for unestablished positions of (a) **ARCHITECT**, Grade III (salaries up to £700 a year) and (b) **ARCHITECTURAL ASSISTANTS** (salaries up to £580 a year) in the Housing and Valuation Department. Commencing salaries in either grade will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Acts, and successful candidates will be eligible for consideration for appointment to the permanent staff on the occurrence of vacancies.

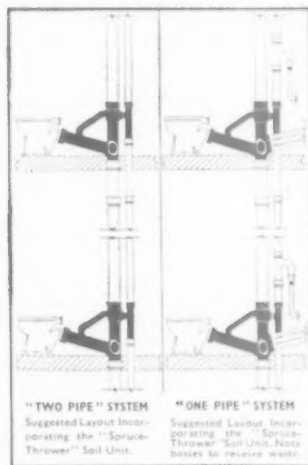
Successful candidates will be required to undertake the design, layout and preparation of working drawings for housing schemes (houses and multi-storey flats) and will be employed in the Housing Architect's Division. Preference will be given to candidates holding a recognised professional qualification.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed envelope required, and quote ref. G.R.3). Canvassing disqualifies. (2269) 10998

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